CHAPTER 6 Alternatives to the Proposed Project

Section 15126.6(a) of the CEQA Guidelines requires that an EIR describe a range of reasonable Alternatives to the project or to the location of the project that could feasibly attain the basic objectives of the project while reducing significant project impacts. An EIR is not required to consider every conceivable Alternative to a project; rather, it must consider a range of potentially feasible Alternatives that will foster informed decision-making and public participation. In addition, an EIR should evaluate the comparative merits of the Alternatives. Therefore, this chapter sets forth potential Alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines relating to the Alternatives analysis (Section 15126.6 et seq.) are summarized below:

- The discussion of Alternatives shall focus on Alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these Alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The "no project" Alternative shall be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved.
- The range of Alternatives required in an EIR is governed by a "rule of reason"; therefore, the EIR must evaluate only those Alternatives necessary to permit a reasoned choice. The Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For Alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an Alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

6.1 RATIONALE FOR SELECTING POTENTIALLY FEASIBLE ALTERNATIVES

The Alternatives may include a different type of project, modification of the proposed project, or suitable Alternative project sites. However, the range of Alternatives discussed in an EIR is governed by a "rule of reason" which CEQA Guidelines Section 15126.6(f) defines as:

> … set[ting] forth only those Alternatives necessary to permit a reasoned choice. The Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those Alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible Alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

Among the factors that may be taken into account when addressing the feasibility of Alternatives (as described in CEQA Guidelines Section 15126.6[f][1]) are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an Alternative site. An EIR need not consider an Alternative whose effects could not be reasonably identified, and whose implementation is remote or speculative.

For purposes of this analysis, the project Alternatives are evaluated to determine the extent to which they attain the basic project objectives, while significantly lessening any significant effects of the project. The objectives are as follows:

- Orchestrate new public and private investment toward the establishment of a more lasting framework for growth and development—a framework of clearly defined districts, centers, street patterns, and local architecture, and landscape identity—upon which new development can reliably respond to, build upon, and draw value from.
- Re-position disinvested corridor properties to capture value in the contemporary marketplace.
- Begin the transformation of the visual character of Beach Boulevard from "anywhere strip" to its proper role as the iconic gateway to and from the beach, and as the city's most visible north/south thoroughfare.
- Promote new investment that supports the growth and success of Bella Terra and Golden West College.
- Build on the presence of Golden West College, Bella Terra, and the existing transit infrastructure to instigate the emergence of a vital and attractive urban district characterized by a synergistic mix of students, customers, residents, pedestrians, transit-riders, office workers, and visitors.
- Instigate the development of a network of pedestrian-oriented streets, promenades, and other public open spaces that encourage walking, and ultimately, walking in combination with transit ridership.
- Enhance pedestrian, bicycle, and vehicular connections between Golden West College, Bella Terra, the Goldenwest Transit Center, and development along Edinger Avenue.
- Balance mobility and community development objectives that enable continued market-driven growth and development while maintaining minimum community mobility standards, and furthering patterns of land use and development that contribute toward long-term regional mobility and livability.
- Make the most of each increment of new development to build toward a more environmentally sustainable future city and region.
- Ensure that new buildings and landscaping contribute to the emergence of an increasingly visible and memorable visual identity appropriate to the unique history and character of the City.
- Ensure adequate utility infrastructure and public services for new development.

6.2 ALTERNATIVES REJECTED AS INFEASIBLE

6.2.1 Alternatives Considered to Reduce Significant Impacts

Air Quality

The significant air quality impacts that are identified in Section 4.2-(Air Quality) of the EIR (both project-specific and cumulative) are the result of long-term planning efforts, and the speculative nature of estimating individual projects that could occur through 2030. As discussed in Impact 4.2-2, "…the amount of emissions generated for each project would vary depending on its size, the land area that would need to be disturbed during construction, and the length of the construction schedule, as well as the number of developments being constructed concurrently as part of the Specific Plan." Any variation of a long-term planning document, regardless of land use changes, would result in the same significant impacts due to the speculative nature of individual development projects. The only way to reduce these impacts would be on an individual project basis, as each of the listed factors above would be known and emissions could then be estimated accurately to determine whether they would exceed SCAQMD thresholds. One individual development project is not considered a feasible Alternative for future land use changes along the corridors through 2030. Consequently, a specific Alternative to reduce air quality impacts was rejected as infeasible.

Cultural Resources

Similar to the Air Quality discussion above, the impact to historical resources was determined to be significant (both project-specific and cumulative) because of the speculative nature of future development. While it is considered unlikely that historical resources would be demolished within the project site, the location and type of specific development projects are currently unknown. Additionally, sites that are not currently considered historic could eventually be designated as such by 2030. Any variation of a long-term planning document, regardless of land use changes, would result in the same significant impacts due to the speculative nature of individual development projects. Therefore, a specific Alternative to reduce impacts to cultural resources was rejected as infeasible.

Noise

Again, similar to the previous discussions, the groundborne vibration impact was determined to be significant (both project-specific and cumulative) because of the speculative nature of future development. As discussed in Impact 4.9-2, "So long as construction occurs more than 50 feet from sensitive receptors, the impact associated with groundborne noise and vibration generated by the equipment would be below 85 VdB and thus would be less than significant. However, as specific site plans or construction schedules are unknown at this time…certain construction activities may be required in proximity to nearby sensitive receptors." Any variation of a long-term planning document, regardless of land use changes, would result in the same significant impacts due to the speculative nature of individual development projects. Therefore, a specific Alternative to reduce impacts to noise was rejected as infeasible.

Population and Housing

The cumulative population and housing impact that was identified in the EIR is due to the fact that the proposed project would represent approximately 71 percent of the total cumulative increase that is estimated to exceed SCAG's 2030 population projections. Although the total cumulative development would only exceed the projections by approximately 1,015 persons, because the proposed project represents a significant portion of the potential increase in residents, the impact was considered significant. A significant decrease in residential uses within the Specific Plan could reduce this impact. Two variations of reduced residential alternatives are evaluated within this chapter as well as a no-project alternative. Each of these is discussed in detail in Section 6.3 (Alternatives to the Project).

Alternative 1 (No Project/ Reasonably Foreseeable Development [Continuation of Existing General Plan]) would not include any residential uses. Consequently, this alternative would eliminate the cumulative population and housing impact, which is discussed in detail in Section 6.4.1-(Alternative 1: No Project/ Reasonably Foreseeable Development [Continuation of Existing General Plan]). However, as also discussed within the analysis, impacts to aesthetics, air quality, and traffic could be greater than the proposed project.

Alternatives 2 and 3 would result in 1,900 fewer residential units and 2,100 fewer residential units, respectively. These reductions would result in approximately 5,054 to 5,586 fewer residents when compared to the proposed project. Therefore, neither Alternative would result in a significant cumulative impact because the overall cumulative development would not exceed SCAG's 2030 population projections.

Public Services (Fire Services)

Project-specific and cumulative impacts to fire services were identified in the EIR because the HBFD has stated that each fire station is currently at capacity. Implementation of MM4.11-1 would ensure that the HBFD receives adequate staffing and/or equipment to maintain acceptable levels of service; however, it is likely that any additional increases in either staffing levels or equipment (trucks, engines, etc.) would require expansions to existing facilities or, potentially, a new fire station(s). Because the specifics of potential future fire-related facilities are unknown at this time (e.g., level of expansion or potential construction of a new station), it is infeasible to provide adequate mitigation measures to cover the breadth of potential future actions. Additionally, because any variation of future land use planning documents as well as individual development projects would require similar mitigation (in that acceptable service levels must be maintained), there are no feasible Alternatives to reduce these impacts until such time as the HBFD has more concrete plans regarding future expansion of the facilities.

Recreation

Project-specific and cumulative impacts to recreation were determined to be significant because implementation of the proposed Specific Plan could result in the construction of recreational facilities. Due to the substantial requirement of approximately 85 acres of new parkland that could be required at buildout of the project, it is not feasible at this time to speculate where future acquisitions, development,

improvements, and/or expansions to open space and parklands throughout the City may occur. A reduction in the number of residential units within the Specific Plan would correlate with a reduction in the requirement of future parkland. Two variations of reduced residential alternatives are evaluated within this chapter as well as a no-project alternative.

Alternative 1 (No Project/ Reasonably Foreseeable Development [Continuation of Existing General Plan]) would not include any residential uses. Consequently, this alternative would reduce the recreation impacts to a less-than-significant level, which is discussed in detail in Section 6.4.1. However, as also discussed within the analysis, impacts to aesthetics, air quality, and traffic could be greater than the proposed project.

With respect to Alternatives 2 and 3, although fewer residential units would be permitted under both scenarios, each one would still require a substantial amount of parkland. Similar to the proposed project, it is not feasible at this time to speculate where future acquisitions, development, improvements, and/or expansions to open space and parklands throughout the City may occur. Because such specifics of future recreational facilities are unknown at this time, the significant impact associated with construction of recreational facilities would remain.

Transportation

As discussed in Section 4.13-of the EIR, the project-related impacts to identified intersections can be mitigated to less-than-significant levels. However, because any increase in trips to the I-405 is considered significant due to its existing deficient condition, and because there is no alternative that would generate zero vehicle trips, there is no feasible alternative to reduce this impact.

Utilities (Water Supply)

California is currently facing a significant water crisis. After experiencing two years of drought and the driest spring on record (2008), water reserves are low. With the Sacramento-San Joaquin Delta ecosystem waning, recent court-ordered restrictions on water deliveries from the Delta have forced the Department of Water Resources (DWR) to restrict pumping in the Delta to protect the threatened delta smelt, thereby reducing the amount of water available to Metropolitan and other SWP contractors by 20 to 30 percent. Drought conditions in the Colorado River Basin and a Sierra snow-pack that is more unreliable due to global climate variation are leaving many communities throughout California facing mandatory restrictions on water use and/or rising water bills. In June 2008, the Governor issued Executive Order S-06-08 declaring a statewide drought, which directed state agencies and departments to take immediate action to address drought conditions and water delivery reductions that exist in California.

These conditions have prompted water suppliers, including Metropolitan Water District of Orange County (MWDOC), to review and amend previous water supply projections, thus leaving less water available for jurisdictions than was previously assumed. Therefore, as a result of drought conditions and uncertainty regarding future pumping operations from the State Water Project (SWP), water supplies are projected to be deficient in the City after 2010 or 2020, depending on the various WSA models used. These water supply scenarios exist regardless of implementation of the proposed Specific Plan.

The statewide supply situation is subject to change and precipitation could return to normal or above-normal in the near-term and then extend over many years. In addition, forthcoming case law or new pumping technology could lift the SWP pumping restrictions; thereby, returning the system to firm delivery capacity. However, due to the uncertainty regarding imported water supplies, the project's impact would remain significant. Since this statewide condition is not a result of the proposed project, there is no land use Alternative that would significantly increase water supply availability beyond the measures already required in the EIR. Therefore, a specific Alternative to reduce impacts to water supplies was rejected as infeasible.

6.2.2 Alternative Site

As the Specific Plan is designed to guide the development of the Beach and Edinger Corridors, an alternative site would not be appropriate as an Alternative to the proposed project.

6.2.3 All Residential or All Commercial

Other land uses such as all residential for all new or redevelopment would not achieve the objectives of the proposed project and would not attract a wide range of activities to provide a dynamic atmosphere along various segments of the corridors or provide enough flexibility to adequately respond to changing market conditions over the long-term. In addition, by allowing only residential uses within the project site, it is likely that many of the significant impacts identified for the proposed project would be increased (e.g., population and housing, recreation, etc.). Therefore, this was rejected from further analysis in the EIR because it does not meet the basic objectives of the proposed project listed above.

All-commercial development would represent similar conditions to continuance of the current General Plan land use and zoning designations. This condition is evaluated under Alternative 1 (No Project/Reasonably Foreseeable Development).

6.2.4 No Project/No Build

As theoretical buildout year of the Specific Plan is 2030, it is considered extremely unlikely that no development on any parcel would occur in the corridors during this time frame. Therefore, because of this remote possibility, the No Project/Reasonably Foreseeable Development scenario was evaluated instead.

6.3 ALTERNATIVES TO THE PROJECT

Three scenarios, representing a range of reasonable Alternatives to the proposed project were selected for detailed analysis. The goal for evaluating any of these Alternatives is to identify ways to avoid or lessen the significant environmental effects resulting from implementation of the proposed project, while attaining most of the project objectives. In general, the primary contention of the proposed Specific Plan has been the perceived significant increase in residential uses that would be permitted in the area. Consequently, because no specific Alternative can reduce any of the known significant impacts to a less-

than-significant level (as discussed above in Section 6.2), consideration was given to reductions in residential uses to determine the varying levels of impacts and how those would compare to the proposed project. Alternatives selected for further analysis include the following:

- **Alternative 1—No Project/Reasonably Foreseeable Development (Continuation of Existing General Plan):** Under this Alternative, development in the project site would occur under the existing General Plan and zoning designations. This Alternative allows the decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.
- **Alternative 2—Decreased Residential:** Under this Alternative, future development would be guided by a Specific Plan that permits a maximum of 4,500 dwelling units and approximately 137,000 square feet (sf) more commercial/office uses than would be permitted by the proposed project. The "increased" commercial results from existing commercial development not being demolished so that residential/mixed-use development can be built. It is an increase compared with the proposed project, but it doesn't represent new commercial construction. Compared to the proposed project's maximum of 6,400 units, this would represent a reduction in residential units by approximately 30 percent (1,900 units), and an increase in commercial/office uses by approximately 16 percent. The majority of the residential units would be decreased from Town Center Boulevard segment (1,055 units), followed by a decrease of 480 units in the Five Points segment, and 365 units in the Neighborhood Parkway segment. Similarly, due to the decrease in residential uses, the majority of increased commercial uses would be located within the Town Center Boulevard segment. All other aspects of the Specific Plan would remain the same. Table 6-1 (Alternative 3—Comparison to Specific Plan) summarizes where the changes would occur.

Table 6-1 Alternative 3—Comparison to Specific Plan

Segment	*Residential Comparison (DU)*	*Commercial Comparison (SF)*
Town Center Boulevard	-1,055	+137,790
Neighborhood Boulevard	—	—
Five Points	-480	-340
Neighborhood Parkway	-365	—
Residential Parkway	—	—
Total	***-1,900***	***+137,450***

- **Alternative 3—Decreased Residential/Increased Commercial:** Under this Alternative, residential units would be decreased even further to a maximum of 4,300 dwelling units, and approximately 487,000 square feet (sf) of additional commercial/office square footage would be added, for a total of approximately 1,337,830 sf of commercial/office uses. This would represent an approximate 33 percent reduction in residential uses and approximate 57 percent increase in commercial uses. Similar to Alternative 2, the majority of the land use changes would occur in the Town Center Boulevard segment. All other aspects of the Specific Plan would remain the same. Table 6-2 (Alternative 3—Comparison to Specific Plan) summarizes where the changes would occur.

Table 6-2	Alternative 3—Comparison to Specific Plan	
Segment	*Residential Comparison (DU)*	*Commercial Comparison (SF)*
Town Center Boulevard	-1,265	+281,840
Neighborhood Boulevard	—	—
Five Points	-480	+55,660
Neighborhood Parkway	-355	+119,930
Residential Parkway	—	+30,000
Total	***-2,100***	***+487,430***

6.4 ANALYSIS OF ALTERNATIVES TO THE PROPOSED PROJECT

6.4.1 Alternative 1: No Project/ Reasonably Foreseeable Development (Continuation of Existing General Plan)

Description

Implementation of the No Project/Reasonably Foreseeable Development Alternative would represent the continuation of the City's existing General Plan and zoning designations to guide future growth and development within the project site. The majority of the project site is zoned Commercial General (CG) which has a height limit of 50 feet (approximately four stories), and varying requirements for setbacks, densities, etc. for commercial/office development. For this Alternative, impacts would be analyzed under a maximum buildout scenario within the project site with the allowed land uses and development standards designated in the existing General Plan and zoning designations. Compared with the proposed project, the overall development potential in the project area under this Alternative would include more commercial and office uses and no residential uses.

Potential Impacts

Aesthetics

Similar to the proposed project, there are no scenic vistas located within the project boundaries. In addition, the Newland House Museum would constitute the only off-site focal view of a scenic vista. Due to its listing on the National Register of Historic Places as a significant historic structure, any future development that may occur under the General Plan that could affect this property would be properly evaluated, per existing requirements. Therefore, continuation of the existing General Plan would not obstruct or otherwise degrade existing scenic vistas, and this impact would be less than significant, similar to the proposed project.

Development under the existing General Plan could result in changes to the visual character of the project site. Although the General Plan policies would prevent a substantial degradation of visual character, it would not provide the unifying aesthetic character (through cohesive development standards

and guidelines) that would improve those areas that are in need of revitalization. This impact would remain less than significant, but would be greater than the proposed project because the existing General Plan would not provide the same level of aesthetic benefits as would the Specific Plan.

Artificial lighting would accompany all new development, including exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting which could be visible from outside. In addition, a majority of the project site currently has a height limit of four stories, which could result in new development that would have similar glare impacts. Therefore, future development under the General Plan would result in similar light and glare impacts when compared to the proposed project, and these impacts would remain less than significant.

Overall, aesthetics impacts would be relatively similar to the proposed Specific Plan; however, because the existing General Plan would not provide the same level of benefits as the proposed project, this alternative is considered to have a greater aesthetic impact.

Air Quality

Implementation of the proposed project was found to be consistent with the AQMP for the South Coast Basin. Since this Alternative is based on what could occur as a result of allowable uses/intensities set forth in the General Plan and the AQMP is based on the general plans of all of the cities in the Basin, this Alternative is expected to have a less than significant impact.

Implementation of the proposed project could contribute substantially to an existing or projected air quality violation for criteria air pollutants during both construction and operation. Construction impacts result from demolition, excavation, building/utility construction, painting, and paving. Similar to the proposed project, development under this Alternative would consist of a series of individual construction projects throughout the buildout of the General Plan. It is not possible to accurately analyze those potential future impacts because emissions from construction vary by project and include: parcel size, length of construction, building size, amount of required paving and utility construction, etc. The proposed project was found to have significant impacts even with the incorporation of mitigation measures MM4.2-1 through MM4.2-14. Although the existing General Plan would not include residential uses, it is reasonable to expect that the air quality impacts would be similar for construction of the increased commercial and office uses under this Alternative. Operation of the proposed project was found to have significant effects as well. The proposed land uses were modeled using the URBEMIS 2007 air modeling software. Operation of the proposed project would generate emissions that far exceed the thresholds of significance recommended by the SCAQMD for VOC, NO_X, CO, and PM_{10}. Because the General Plan would have more vehicle trips generated compared to the proposed project, it is reasonable to expect that this Alternative will also result in significant impacts, although they could be to a greater degree.

Implementation of the proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the proposed project region is in nonattainment under an applicable federal or state ambient air quality standard. Also discussed above, operation of the proposed project would generate emissions that exceed the thresholds of significance recommended by the SCAQMD for VOC,

NO_X, CO, and PM_{10}. Because the Basin is in nonattainment for PM_{10}, VOC, and NO_X (VOC and NO_X being precursors of ozone), the proposed project would make a cumulatively considerable contribution to criteria pollutant emissions. It would be reasonable to expect, given the above discussion, that this Alternative would also have a significant impact. However, because continuation of the General Plan would have increased vehicle trips, this Alternative could result in higher emissions compared to the proposed project.

Operation of the proposed project would increase local traffic volumes above existing conditions, but would not expose sensitive receptors to substantial localized carbon monoxide (CO) concentrations. CALINE4 modeling software was used to model area intersections. Future CO concentrations near these intersections would not exceed the national 35.0 ppm and State 20.0 ppm 1-hour ambient air quality standards or the national or State 9.0 ppm 8-hour ambient air quality standards. In fact, they are well below the threshold. Although the traffic generated by the existing General Plan would be greater than the proposed project, it would be reasonable to expect similar less than significant impacts resulting from this Alternative because the CO concentrations are so far below the thresholds.

Similar to the proposed project, construction and operation of commercial and office development under this Alternative would not create objectionable odors. Standard construction requirements would be imposed upon each applicant to minimize odors from construction, and future developments would be required to adhere to the City's solid waste regulations. Therefore, any project-generated refuse would be stored in covered containers and trash removed at regular intervals. This impact would remain less than significant, similar to the proposed project.

Overall, air quality impacts anticipated under this Alternative would be similar to the proposed project and many would remain significant and unavoidable. However, because the existing General Plan would generate more vehicle trips, it is possible that impacts would be greater than the proposed project because mobile emissions would be higher.

Biological Resources

Similar to the proposed project, construction-related activities under the existing General Plan may include building demolition and/or relocation, grading, materials laydown, access and infrastructure improvements, and building construction. These activities could result in the disturbance of nesting migratory species covered under the MBTA. Impacts to migratory birds would be addressed on a site-by-site basis. It is expected that mitigation measures similar to MM4.3-1 would be applied as necessary to comply with the MBTA, and reduce impacts to a less-than-significant level. This impact would be comparable to the proposed project.

There are no wetland habitats or blue-line streams within the project site, as defined by the *Clean Water Act* or the *California Fish and Game Code*. However, wetlands do exist south of the project boundary and the potential exists for new wetlands to be created or develop within the project site throughout buildout of the General Plan. Similar to the proposed Specific Plan, if wetlands are found in the future, the project applicant will be required to obtain all necessary wetland permits and mitigate for impacts to wetland

habitats. Consequently, impacts would be comparable to the proposed project and would be less than significant.

Overall, impacts to biological resources would be the same as the proposed project.

Cultural Resources

Because development could still occur within the project site (regardless of the type), the potential for demolition of historic structures exists. Although this is still considered unlikely, the impact would remain significant and unavoidable because the General Plan does not specifically prohibit the demolition of such resources, similar to the proposed project. The project site is considered to be sensitive for the presence of Native American cultural resources, including human remains, as well as paleontological resources. Consequently, any future development (regardless of land use type) that could encounter undisturbed soils would be required to conduct site-specific cultural resource investigations and implement any appropriate avoidance or mitigation measures as deemed necessary, similar to the mitigation measures identified for the proposed project. Consequently, impacts would be comparable to the proposed project and would be less than significant. While the development potential for land use categories would differ from the proposed project under continuation of the existing General Plan (e.g., less residential and more commercial and office uses), impacts to cultural resources would be expected to be substantially similar to those of the proposed project.

Geology and Soils

Similar to the proposed project, this Alternative could expose people and/or structures to potentially substantial adverse effects resulting from strong seismic groundshaking or seismic-related ground failure. All impacts associated with geological and soil impacts that were identified for the proposed project would also apply to this Alternative. The risks to people and structures would not be increased regardless of the size or type of development, as adherence to existing regulations would assure seismic safety to the greatest extent possible. All future development in the project area would be required to adhere to the most recent California Building Codes (CBC), which includes strict building specifications to ensure structural and foundational stability, similar to the proposed project. In addition, the City would continue to require all future development to prepare and submit a detailed soils and geotechnical analysis for site-specific projects. Therefore, because all future development projects would be required to adhere to existing regulations, impacts associated with rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and landslides would continue to be less than significant.

Similar to the proposed project, future development under the existing General Plan would result in ground-disrupting activities such as excavation and trenching for foundations and utilities; soil compaction and site grading; and the erection of new structures, all of which would temporarily disturb soils. This could result in soil erosion; however, Applicants for specific development projects must submit a Notice of Intent (NOI) to the State Water Resources Control Board (SWRCB) for coverage under the Statewide General Construction Activity Stormwater Permit and must comply with all applicable requirements, including the preparation of a SWPPP, applicable NPDES Regulations, and best management practices (BMP). Such compliance, in addition to implementation of existing code

requirements would ensure that erosion and other soil instability impacts resulting from future construction would be less than significant.

Construction and building of commercial and office uses would follow all established policies and codes. Through compliance with federal, state, and local regulations related to seismic safety, impacts associated with geology and soils would remain less than significant, similar to the proposed project.

Hazards and Hazardous Materials

The project site is in an urban area that is already heavily developed with commercial uses and office uses and implementation of this Alternative would result in more of the same type of development that already exists. Similar to existing conditions and those discussed for the proposed project, operation of the uses permitted under the General Plan would involve the use of hazardous materials in the form of basic cleaning materials and landscaping chemicals. Future development under the General Plan would be required to comply with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and disposal through the implementation of established safety practices, procedures, and reporting requirements. Compliance with existing regulations would also minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials. Similar mitigation measures to those identified for the proposed project (MM4.6-1 through 4.6-3) would be required for new developments, as necessary, which would minimize the potential risk of contamination by implementing investigation and remediation efforts at future development sites. Such mitigation would also ensure that if future development is located on a site that is included on a list of hazardous materials sites, appropriate remediation would occur. Implementation of this alternative would have the same effect associated with helipads in the project site as any new helipads or heliports proposed in the future would be required to comply with all applicable regulations. Lastly, as required by law, future projects within the project site would be required to provide adequate access for emergency vehicles. In addition, similar to existing conditions, construction of future development (regardless of land use type) could result in short-term temporary impacts on street traffic. Projects would be evaluated on an individual basis, and it is likely that similar mitigation to MM4.6-4 would be required to ensure that emergency response teams for the City of Huntington Beach would be notified of any lane closures during construction activities and that a minimum one lane would remain open at all times to provide adequate emergency access to the site and surrounding neighborhoods. Therefore, although the type of development under Alternative 1 would differ from the proposed project in that no residential uses would be permitted, all potential impacts with respect to hazards and hazardous materials would be substantially similar and would remain less than significant.

Hydrology and Water Quality

Similar to the proposed project, construction and operation of future uses under the General Plan could increase stormwater runoff such that stormwater pollutant loads or concentrations, including erosion and sediment, are increased. As discussed in Impact 4.7-1, the conversion of some retail/commercial areas to multifamily or high density residential would result in lower pollutant concentrations in stormwater runoff compared with retail/commercial lands (LACDPW 2001). Therefore, continuation of the existing General Plan could result in higher pollutant concentrations than the proposed project because no

conversions to multi-family or high-density residential would occur. However, all existing regulations, programs, and policies (Municipal NPDES Permit and associated DAMP, URMP, WQMP, and City of Huntington Beach LIP; Municipal Code Section 14.25; City conditions of approval and permit review process; and, General Plan Goal EH2), that are discussed in detail for the proposed project would also apply to development under this Alternative. In addition, mitigation measures similar to MM4.7-1 would be required for development under this Alternative to reduce potential pollutant loads and sediment in runoff, ensure that appropriate BMPs are employed, ensure that regulatory requirements are met, and that any post-construction violation of WDRs would not be substantial. Therefore, effects on water quality standards would not be substantial and impacts of this Alternative on on-site erosion and siltation and violation of WDRs or water quality standards would be less than significant, similar to the proposed project.

Similar impacts would occur with respect to the depletion of groundwater resources compared to the proposed project because future development under this Alternative will still be compelled to comply with regulatory requirements, code requirements (depicted as CR4.7-1 in this EIR), and mitigation measures similar to MM4.7-2. This mitigation would require a Groundwater Hydrology Study to determine whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. Therefore, impacts on groundwater supplies and lowering of the local groundwater table would be less than significant, similar to the proposed project.

As discussed in Impact 4.7-3, the storm drain system serving the project site is currently constrained for build-out of the General Plan (as assessed in the MPD) and may be constrained for existing conditions. Consequently, mitigation measures similar to MM4.7-3 and MM4.7-4 would be required to assess each specific development contribution under continuation of the General Plan to potential system capacity constraints and provide for mitigation of constraints such that potential impacts to storm drain system capacities would be less than significant.

Decreasing water supplies and increasing water demands require extreme conservation methods that may include substantial use of recycled water. This condition would remain regardless of implementation of the proposed project. If recycled water contributes to dry-weather runoff, the high salinity runoff could also affect surface water quality. Similar to the proposed project, use of recycled water under this Alternative would be subject to either an individual WDR or the final Recycled Water WDR (when adopted), which would impose effluent limitations to minimize potential degradation of water resources. Therefore, water quality impacts from recycled water use would be less than significant.

Although no residential uses would be developed under this Alternative, structures could still be placed within a 100-year flood hazard area and expose people and structures to risk of loss, injury, or death involving flooding including flooding by failure of a levee or dam. Nonresidential or commercial structures can be either elevated or dry flood-proofed to, or above, the 100-year flood elevation. In addition, improvements to the Santa Ana River and Prado Dam reduce the risk of dam failure, and existing emergency response mechanisms would also minimize the risk to people and structures from failure of the Prado Dam. Therefore, similar to the proposed project, adherence to existing regulations would ensure that impacts associated with risks to people or structures, from placement of structures within a flood hazard area and dam failure would be less than significant.

The majority of the project site is located at the edge of the flood hazard area, in an area that is likely flooded by lateral spreading, and would not result in substantially more structures in the overall floodplain compared to existing conditions (the floodplain is currently primarily developed with structures). Because the project site currently contains large structures with little vacant lands that would be developed, continuation of the General Plan would not create substantially more fill compared to existing conditions. Therefore, although structures could be located within a flood hazard area, future developments would not impede or redirect flood flows. Similar to the proposed project, this impact would be less than significant.

Similar to the proposed project, implementation of this Alternative could result in the construction of new and/or improved stormwater drainage facilities. Construction of these new facilities would be subject to existing regulatory requirements, including but not limited to preparation and implementation of a SWPPP and a City precise grading permit, the De Minimus Threat General Permit, and stormwater BMPs. Therefore, existing regulatory requirements would ensure that construction of new or expanded stormwater drainage facilities would not result in substantial environmental effects. Similar to the proposed project, this impact would remain less than significant.

Land Use

Implementation of this Alternative would not result in impacts related to land use nor would it conflict with existing land use policies in place for the site or the City. Instead, this Alternative would develop the site to the amount currently allowed under the existing General Plan. Therefore, this Alternative would not interfere with the existing land use plans for the project site, and would result in no impact, similar to the proposed project which would have a less than significant impact.

Noise

Development of projects as part of the proposed project and for this Alternative would require the use of heavy equipment for demolition, site excavation, installation of utilities, site grading, paving, and building fabrication. Under Section 8.40.090(d) (Special Provisions) of Chapter 8.40 of the City's *Municipal Code*, noise sources associated with construction are exempt from the requirements of the Municipal Code, provided that the project developer has acquired the proper permit(s) from the City and construction activities do not occur between the hours of 8:00 P.M. and 7:00 A.M. on weekdays, including Saturday, or at any time on Sunday or a federal holiday. In addition, this Alternative would be expected to adhere to mitigation measures similar to those required by the proposed project. Thus, the proposed project and this Alternative would not violate established standards and impacts would be less than significant.

Impacts related to operation of the proposed project were found to be less than significant with mitigation. Operational impacts were found as a result of HVAC units on new buildings. Since the Alternative would have similar impacts and would require similar mitigation measures that require the installation of sound attenuating walls, impacts would be similar and less than significant.

Impacts related to excessive ground vibration were found to be less than significant for operation of the proposed project. Much of the source of vibration would be from delivery trucks, but they are expected

to not generate vibration levels in excess of FTA's 85 VdB annoyance threshold. This impact would be similar for the proposed project and this Alternative. Vibration impacts resulting from construction were found to be significant due to certain construction equipment. The EIR for the proposed project found that nearby sensitive receptors could experience up to 87 VdB if pile drivers are not used, and up to 112 VdB if pile drivers are used. Even after the implementation of mitigation measures, impacts remain significant. Since this Alternative would allow the construction of similar structures that utilize similar construction techniques, the Alternative is expected to have similar significant impacts related to vibration.

The proposed project was found to have less than significant impacts related to substantial temporary or periodic increases in ambient noise levels for both construction and operation. Construction activities could generate substantial noise. However, construction activities are exempt from the allowable noise thresholds set forth in the Noise Ordinance as long as they comply with the Municipal Code by limiting hours and days when construction can occur. Additionally, the proposed project will adhere to mitigation measures MM4.9-1 through MM4.9-3. Since construction activities and techniques would be similar between the proposed project and this Alternative, impacts also would be similar and less than significant. Operation of the proposed project was not found to have substantial temporary or periodic increases in ambient noise levels since the land uses would not allow such noise generating activities. The land uses in this Alternative would be similar (but without the residential) and would expect to have similar less-than-significant impacts.

The proposed project was found to have less than significant impacts related to causing a substantial permanent increase in ambient noise. With the types of land uses contemplated in both the proposed project and this Alternative, traffic noise is the greatest source of noise. Although continuation of the General Plan would result in more traffic trips generated when compared to the proposed project, none of the area roadway segments are expected to emit a substantial increase in ambient noise for either the proposed project or as a result of buildout of the General Plan. Thus, the impacts are similar between the project and this Alternative and are considered less than significant.

Population and Housing

Implementation of this Alternative will have no impacts related to population and housing. The project area as set forth in the General Plan does not include residential land use designation or zoning. SCAG's growth projections are based on local general plans and Housing Elements. The proposed project would essentially result in a redistribution of residential growth within the City (i.e., the project would not result in additional residential growth beyond that anticipated in the General Plan). Therefore, because this Alternative consists of only what may develop as a result of the General Plan, no impacts would occur. This would be similar to the less than significant impacts that would result from the proposed project due to the redistribution effect of the project. However, because the City does not anticipate subsequent re-zoning of other areas to reflect the redistribution intent, the proposed project would represent a net growth of 6,400 dwelling units compared to zero units under this Alternative. Therefore, this Alternative would result in a reduced cumulative impact compared to the proposed project because it would not represent a significant portion of the overall residential growth through 2030 that is estimated to exceed

SCAG's growth projections by approximately 1,015 persons. Therefore, the significant cumulative impact would not occur under this Alternative.

Public Services

Implementation of this Alternative would not result in additional impacts to public services beyond those identified for the proposed project. Fire protection was found to be a significant and unavoidable impact for the proposed project, even after the incorporation of MM4.11-1. The impact was identified as significant because the HBFD is currently operating the existing fire stations at their full capacity. Because no residential uses would be developed, implementation of this Alternative is expected to have a lesser impact than the proposed project. However, because the level of commercial and office development that would be permitted under this Alternative could potentially result in the need for additional staffing or equipment levels (as required by MM4.11-1), it is expected that this impact would remain significant and unavoidable. Additional demands on police personnel as a result of implementing this Alternative would not be substantial. The ratio of population to police officers would be slightly lower under this Alternative as it would generate no resident population and service planning was based on land uses set forth in the General Plan. Similarly, impacts on schools would be less than those identified for the proposed project because no resident population would be generated under this Alternative. In addition, code requirements CR4.11-1 and CR4.11-2 would still be required for commercial development, which would further ensure that this impact remains less than significant. Library services would be considered less than significant with respect to this Alternative, assuming compliance with City Requirement CR4.11-3, which requires the Applicant to pay library and community enrichment impact fees, similar to the proposed project.

Overall, impacts to public services would be less than the proposed project because no residential uses would be permitted; however, the impact to fire services would remain significant and unavoidable.

Recreation

This Alternative would not result in the development of residential units. The proposed project could develop 6,400 new dwelling units at buildout, adding approximately 17,024 new residents. This Alternative proposes no residential units and would be required to pay parks and recreation development impact fees, as listed in CR4.12-1. Construction and operation of this Alternative is not anticipated to interfere with existing parks and recreational resources since parks and recreation planning is based on contemplated land uses and intensities set forth in the General Plan. Impacts related to the construction of new park facilities were found to be significant for the proposed project. However, it is anticipated that impacts would be less than significant under this Alternative because the uses were contemplated by the General Plan and there is no residential component.

Transportation

As can be seen from the trip generation results in Table 4.13-7 (Project Trip Generation Summary) of the EIR, the proposed project generates lower AM peak hour trips (17,371 trips versus 18,435 trips) and significantly less PM peak hour trips (23,227 trips versus 26,533 trips) and daily trips (294,282 trips versus

353,965 trips) than the General Plan land uses for the site. The increase of 6,400 residential units under the proposed project does cause an increase in the AM peak hour outbound trips, although the overall AM peak hour total (17,371 trips) is still lower than the current General Plan total (18,435 trips). The proposed project was determined to have interim (2016) and long-range (2030) significant impacts related to the existing traffic load and capacity of the street system. It was determined that with mitigation measures MM4.13-1 through MM4.13-18, the project-related impacts would be reduced to a less-than-significant level at all affected intersections in 2016 and 2030. However, traffic impacts would remain significant under both conditions because implementation of mitigation measures at Caltrans intersections cannot be guaranteed by the City. It appears likely that the proposed project will have other positive benefits over this Alternative in that it proposed 6,400 residential units. This may reduce the number of trips since many people might be able to walk to neighborhood serving commercial uses or to places of employment. Thus, it would be reasonable to assume that this Alternative would produce impacts similar, if not greater, than those of the proposed project because more trips would be generated under the existing General Plan.

Construction traffic impacts were found to be less than significant for the proposed project due to the time limits imposed on construction activities in the Noise Ordinance and Section 8.40.090(d) of the Municipal Code. In addition, the project area is accessible by several designated truck routes. Impacts to the County's CMP were found to be less than significant with the proposed project as well as for this Alternative. Impacts related to increasing roadway hazards were found to be less than significant for the proposed project. The same code requirements (CR4.13-1 and 4.13-2) would be required under this Alternative. Therefore, impacts are expected to be similar.

Impacts related to inadequate emergency access were found to be less than significant for the proposed project since, as part of standard development procedures, plans for future development would be submitted to the city for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations. This same level of compliance would be required under this Alternative and therefore, impacts are expected to be similar and less than significant.

Impacts related to inadequate parking were found to be less than significant for the proposed project. This Alternative would be subject to the parking requirements set forth in the City's Zoning Code. These requirements would ensure that impacts resulting from this Alternative would be less than significant.

Overall, impacts related to transportation and traffic would be similar to, although slightly greater than those identified for the proposed project.

Utilities

Currently, the total existing water demand for the project area is approximately 397 AFY, which is the sum of the demands from the "Commercial Uses" and "Residential, Hospitality, Medical Service" facilities. Full build-out of the General Plan would allow increased retail and office uses but would not permit any residential uses. Because residential uses have the highest water demand factor, this Alternative would have a lesser water demand compared to the proposed project. Similar to the proposed

project, future development of the infrastructure under this Alternative would adhere to existing laws and regulations, and the water conveyance infrastructure shall be appropriately sized for each site-specific development, which includes potable water, domestic irrigation, and fire flow demands. In addition, because the existing water treatment plants could adequately serve the proposed project, they would also be able to serve the demand generated by continuation of the General Plan without requiring expansions to these facilities. However, the projected water supply scenarios in Section 4.14 (Utilities and Service Systems) would still apply due to overall growth in the City, including growth permitted under this Alternative. A supply deficit would still remain due to the City's lack of sufficient water resources after 2010 or 2020, depending on the various WSA models used, due to a reduction of imported water supply under the State Water Project (SWP) supply curtailments. Therefore, although this Alternative would result in less water demand than the proposed project, continuation of the General Plan would also have a significant and unavoidable impact, as no mitigation would overcome the citywide supply shortfall.

For wastewater impacts, continuation of the General Plan would result in a total of 2.10 MGD of sewer flows (refer to Table 3-2 in Appendix H). This is approximately 0.76 MGD less than the proposed project. Although the sewage flows would be less, the discharges associated with development under the General Plan could still exceed the capacity of several existing sewer pipes and require upsizing at several locations. It is assumed that future development (regardless of land use type) would require a sewer study at the time of development of individual projects to determine if existing sewer lines need to be upgraded to accommodate the individual project's sewer flow. Therefore, it is assumed that similar code requirements and mitigation measures would still be implemented under this Alternative. In addition, OCSD would continue to have adequate treatment capacity available under this Alternative. Further, development under the General Plan would be required to adhere to existing laws and regulations associated with wastewater discharge and treatment requirements. Therefore, wastewater impacts would be less than significant, but would be of a lesser magnitude than the proposed project due to the 0.76 MGD decrease in sewer flows.

As shown in Table 6-3 (Difference between General Plan and Specific Plan Solid Waste Generation), Alternative 1 would generate approximately 10,990 fewer pounds per day (or a decrease of 2,006 tons per year) compared to the proposed project. Because the existing landfills demonstrate sufficient capacity to accept the increase in waste stream resulting from the proposed project, a lesser amount of solid waste would also be accommodated. Therefore, impacts would still be less than significant, but would be of a lesser magnitude than the proposed project due to the decrease in solid waste generated.

Residential uses have significantly higher electricity and natural gas demands compared to commercial, office, and hotel uses. Therefore, this Alternative would significantly reduce annual energy demands when compared to the proposed project, as shown in Table 6-4 (Difference between General Plan and Specific Plan Electricity Demands) and Table 6-5 (Difference between General Plan and Specific Plan Natural Gas Demands). Because an adequate supply of electricity is anticipated to be available to serve the proposed project, future development under the General Plan would also be adequately served. Additionally, all new buildings are required to conform to the energy conservation standards specified in CCR Title 24. Therefore, impacts to energy would still be less than significant, but would be of a lesser magnitude than the proposed project.

Table 6-3	Difference between General Plan and Specific Plan Solid Waste Generation			
Land Use	*Solid Waste Generation Rates (pounds/day)*	*Units**	*Waste Generated (pounds/day)*	*Waste Generated (tons/year)*
Commercial	0.006/sf	+2,086,000	12,516	2,284
Office	0.006/sf	+145,000	870	159
Residential	4/du	-6,037	(24,148)	(4,407)
Hotel	2/room	-114	(228)	(42)
		Total	***-10,990***	***-2,006***

* Net units obtained from Table 3-1 in Traffic Study (Appendix F). Specific Plan land uses were subtracted from Current General Plan land uses. In addition, page 3-1 of Traffic Study states that General Plan would add 236 hotel rooms.

Table 6-4	Difference between General Plan and Specific Plan Electricity Demands		
Land Use	*Generation Rate*	*Unit**	*Demand (kWh/year)*
Commercial	11.8 kWh/year/sf	+2,086,000	24,614,800
Office	8.8 kWh/year/sf	+145,000	1,276,000
Residential	6,081.00 kWh/year/unit	-6,037	(36,710,997)
Hotel	6.8 kWh/year/sf	-114	(775)
		Total	***-10,820,972***

* Net units obtained from Table 3-1 in Traffic Study (Appendix F). Specific Plan land uses were subtracted from Current General Plan land uses. In addition, page 3-1 of Traffic Study states that General Plan would add 236 hotel rooms.

Table 6-5	Difference between General Plan and Specific Plan Natural Gas Demands		
Land Use	*Generation Rate*	*Unit**	*Demand (cf/year)*
Commercial	34.8-cf/sf/year	+2,086,000	72,592,800
Office	24 cf/sf/year	+145,000	3,480
Residential	49,260 cf/du/year	-6,037	(297,382,620)
Hotel	57.6 cf/sf/year	-114	(6,566)
		Total	***-224,792,906***

* Net units obtained from Table 3-1 in Traffic Study (Appendix F). Specific Plan land uses were subtracted from Current General Plan land uses. In addition, page 3-1 of Traffic Study states that General Plan would add 236 hotel rooms.

Climate Change

An analysis of the potential significant emission of GHG was done for the proposed project. During buildout and operation of the proposed project, GHGs would be emitted as the result of construction activities and deliveries; new direct operational sources, such as operation of emergency generators, natural gas usage, and operation of fleet vehicles; and indirect operational sources, such as production of electricity, steam and chilled water, transport of water, and decomposition of project-related wastes. GHGs would also be emitted by visitors and employees travelling to and from the project area. Since the proposed project includes measures that are consistent with strategies recommended by the CCAT and

the California Attorney General and due to the type of development allowed under the proposed project, the impacts associated with GHG emissions during project operation are considered less than significant. This Alternative proposes no residential land uses, which makes it slightly dissimilar to the proposed project. However, it is anticipated that future development under this Alternative will be required to comply with the same measures as the proposed project as well as mitigation measures similar to MM4.15-1 through MM4.15-9. As a result, this Alternative is expected to have similar less-than-significant impacts.

Attainment of Project Objectives

Under this Alternative, construction of commercial and office uses would be allowed similar to the proposed project. However, the growth would occur organically and would reflect the interests of individual developers within the constraints of City policy. However, merely developing commercial and office uses as the project area is currently zoned would be in direct conflict with the objectives of the proposed project. The purpose of the Specific Plan is to require comprehensive planning for the entire area, revitalizing, and creating a pleasant and vibrant environment. The intent is to begin "the transformation of the visual character of Beach Boulevard from "anywhere strip" to its proper role as the iconic gateway to and from the beach, and as the city's most visible north/south thoroughfare." The proposed project would allow a unified planning approach and specific design standards where future subsequent projects serve as independent pieces of the greater whole. Development under this Alternative will be more of the same type of development (e.g. strip commercial), which is not the intent of the proposed project.

The Alternative would not fulfill the project objectives identified for the proposed project. However, it would eliminate the significant cumulative population and housing impact as well as the significant recreation impact because no residential uses would be permitted. Simultaneously, it could result in greater impacts to Aesthetics, Air Quality, and Traffic for the same reason.

6.4.2 Alternative 2: Decreased Residential

Description

Under this Alternative, future development would be guided by a Specific Plan that permits a maximum of 4,500 dwelling units and approximately 137,000 square feet (sf) more commercial/office uses than would be permitted by the proposed project. Compared to the proposed project's maximum of 6,400 units, this would represent a reduction in residential units by approximately 30 percent (1,900 units), and an increase in commercial/office uses by approximately 16 percent. The majority of the residential units would be decreased from Town Center Boulevard segment (1,055 units), followed by a decrease of 480 units in the Five Points segment, and 365 units in the Neighborhood Parkway segment. Similarly, due to the decrease in residential uses, the majority of increased commercial uses would be located within the Town Center Boulevard segment. All other aspects of the Specific Plan would remain the same.

Potential Impacts

Aesthetics

Similar to the proposed project, there are no scenic vistas located within the project boundaries. In addition, the Newland House Museum would constitute the only off-site focal view of a scenic vista. Due to its listing on the National Register of Historic Places as a significant historic structure, any future development that may occur under this Alternative that could affect this property would be properly evaluated, per existing requirements. Therefore, implementation of Alternative 2 would not obstruct or otherwise degrade existing scenic vistas, and this impact would be less than significant, similar to the proposed project.

Development under this Alternative could result in the same changes to the visual character of the project site as compared to the proposed project. In general, while portions of the project area would change and intensify under Alternative 2 compared to existing conditions, development standards and guidelines of the Specific Plan would ensure that future development includes proper site planning, unique architecture, high-quality building materials, and extensive indoor and outdoor amenities. In general, future development under Alternative 2 would serve to improve the aesthetic character of the project area and enhance the identity of the Beach and Edinger Corridors. This impact would remain less than significant similar to the proposed project because it would also be developed under the Specific Plan.

Artificial lighting would accompany all new development, including exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting which could be visible from outside. As discussed for the proposed project, new development would generally range from one to three stories at a minimum, and from four to six stories at a maximum permitted height, depending on the various segments. Buildings generally three or more stories in height have the potential to include large building faces that could introduce reflective surfaces (e.g., brightly colored building façades, reflective glass) that could increase existing levels of daytime glare. Implementation of MM4.1-2 would still apply to development under this Alternative. Therefore, future development under this Alternative would result in similar light and glare impacts when compared to the proposed project, and these impacts would remain less than significant.

Overall, aesthetics impacts would be identical to those of the proposed project.

Air Quality

Implementation of the proposed project was found to be consistent with the AQMP for the South Coast Basin. Since this Alternative will incorporate 1,900 fewer residential units, its impact would be lesser than the proposed project. As a result, this Alternative would be consistent with the AQMP.

Implementation of the proposed project could contribute substantially to an existing or projected air quality violation for criteria air pollutants during both construction and operation. Construction impacts result from demolition, excavation, building/utility construction, painting, and paving. Both the proposed project and this Alternative would consist of a series of individual construction projects

throughout the buildout of the Specific Plan. It is not possible to analyze those potential future impacts because emissions from construction vary by project and include: parcel size, length of construction, building size, amount of required paving and utility construction, etc. The proposed project was found to have significant impacts even with the incorporation of mitigation measures MM4.2-1 through MM4.2-14. Although this Alternative includes 1,900 fewer residential units, it is reasonable to expect that the air quality impacts would be similar to construction of the proposed project because the specific construction timeline of future development is speculative. Operation of the proposed project was found to have significant effects as well. The proposed land uses were modeled using the URBEMIS 2007 air modeling software. Operation of the proposed project would generate emissions that far exceed the thresholds of significance recommended by the SCAQMD for VOC, NO_X, CO, and PM_{10}. Therefore, it is reasonable to expect that this Alternative will have similar significant impacts, although they could be to a lesser degree because fewer vehicle trips would be generated.

Implementation of the proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the proposed project region is in nonattainment under an applicable federal or state ambient air quality standard. Also discussed above, operation of the proposed project would generate emissions that exceed the thresholds of significance recommended by the SCAQMD for VOC, NO_X, CO, and PM_{10}. Because the Basin is in nonattainment for PM_{10}, VOC, and NO_X (VOC and NO_X being precursors of ozone), the proposed project would make a cumulatively considerable contribution to criteria pollutant emissions. It would be reasonable to expect, given the above discussion, that this Alternative would have a similar significant impact. However, because this alternative would have fewer vehicle trips due to the reduced residential component, Alternative 2 could result in lower emissions compared to the proposed project.

Operation of the proposed project would increase local traffic volumes above existing conditions, but would not expose sensitive receptors to substantial localized carbon monoxide (CO) concentrations. CALINE4 modeling software was used to model area intersections. Future CO concentrations near these intersections would not exceed the national 35.0 ppm and State 20.0 ppm 1-hour ambient air quality standards or the national or State 9.0 ppm 8-hour ambient air quality standards. In fact, they are well below the threshold. Since the traffic generated by this Alternative will be less than that of the proposed project, it would be reasonable to expect similar less than significant impacts resulting from the Alternative.

Construction and operation of this Alternative would not create objectionable odors. Standard construction requirements would be imposed upon each applicant to minimize odors from construction, and future developments would be required to adhere to the City's solid waste regulations. Therefore, any project-generated refuse would be stored in covered containers and trash removed at regular intervals. This impact would remain less than significant, similar to the proposed project.

Overall, air quality impacts anticipated under this Alternative would be similar to the proposed project and many would remain significant and unavoidable. However, because Alternative 2 would generate fewer vehicle trips, it is possible that impacts would be less than the proposed project because mobile emissions would be reduced.

Biological Resources

Similar to the proposed project, construction-related activities under this Alternative may include building demolition and/or relocation, grading, materials laydown, access and infrastructure improvements, and building construction. These activities could result in the disturbance of nesting migratory species covered under the MBTA. Impacts to migratory birds would be addressed on a site-by-site basis. It is expected that mitigation measures similar to MM4.3-1 would be applied as necessary to comply with the MBTA, and reduce impacts to a less-than-significant level. This impact would be comparable to the proposed project.

There are no wetland habitats or blue-line streams within the project site, as defined by the *Clean Water Act* or the *California Fish and Game Code*. However, wetlands do exist south of the project boundary and the potential exists for new wetlands to be created or develop within the project site throughout build-out of this Alternative. Similar to the proposed Specific Plan, if wetlands are found in the future, the project applicant will be required to obtain all necessary wetland permits and mitigate for impacts to wetland habitats. Consequently, impacts would be comparable to the proposed project and would be less than significant.

Overall, impacts to biological resources would be the same as the proposed project.

Cultural Resources

Because development could still occur within the project site (regardless of the type), the potential for demolition of historic structures exists. Although this is still considered unlikely, the impact would remain significant and unavoidable because the Specific Plan does not specifically prohibit the demolition of such resources, similar to the proposed project and existing conditions. The project site is considered to be sensitive for the presence of Native American cultural resources, including human remains, as well as paleontological resources. Consequently, any future development that could encounter undisturbed soils would be required to conduct site-specific cultural resource investigations and implement any appropriate avoidance or mitigation measures as deemed necessary, similar to the mitigation measures identified for the proposed project. Consequently, impacts would be comparable to the proposed project and would be less than significant. While the development potential for land use categories would differ from the proposed project (e.g., 1,900 fewer residential units), impacts to cultural resources would be expected to be similar to those of the proposed project.

Geology and Soils

Similar to the proposed project, this Alternative could expose people and/or structures to potentially substantial adverse effects resulting from strong seismic groundshaking or seismic-related ground failure. All impacts associated with geological and soil impacts that were identified for the proposed project would also apply to this Alternative. Although fewer residential units would be constructed under this alternative, the risks to people and structures would be the same, as adherence to existing regulations would assure seismic safety to the greatest extent possible. In addition, the City would continue to require all future development to prepare and submit a detailed soils and geotechnical analysis for site-

specific projects. Therefore, because all future development projects would be required to adhere to existing regulations, impacts associated with rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and landslides would continue to be less than significant.

Similar to the proposed project, future development would result in ground-disrupting activities such as excavation and trenching for foundations and utilities; soil compaction and site grading; and the erection of new structures, all of which would temporarily disturb soils. This could result in soil erosion; however, Applicants for specific development projects must submit a Notice of Intent (NOI) to the State Water Resources Control Board (SWRCB) for coverage under the Statewide General Construction Activity Stormwater Permit and must comply with all applicable requirements, including the preparation of a SWPPP, applicable NPDES Regulations, and best management practices (BMP). Such compliance, in addition to implementation of existing code requirements would ensure that erosion and other soil instability impacts resulting from future construction would be less than significant.

Construction and building of the uses allowed under this Alternative would follow all established policies and codes. Through compliance with federal, state, and local regulations related to seismic safety, impacts would remain less than significant. Therefore, impacts associated with geology and soils would be similar to the proposed project and would result in a less-than-significant impact.

Hazards and Hazardous Materials

The project site is in an urban area that is already heavily developed with commercial uses and office uses. Implementation of this Alternative would result in slightly less intensive development compared to the proposed project. Similar to existing conditions and those discussed for the proposed project, operation of the proposed uses would involve the use of hazardous materials in the form of basic cleaning materials and landscaping chemicals. Future development under the Specific Plan would be required to comply with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and disposal through the implementation of established safety practices, procedures, and reporting requirements. Compliance with existing regulations would also minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials. The same mitigation measures as those identified for the proposed project (MM4.6-1 through MM4.6-3) would still be required for new developments, as necessary, which would minimize the potential risk of contamination by implementing investigation and remediation efforts at future development sites. Such mitigation would also ensure that if future development is located on a site that is included on a list of hazardous materials sites, appropriate remediation would occur. Implementation of this alternative would have the same effect associated with helipads in the project site as any new helipads or heliports proposed in the future would be required to comply with all applicable regulations. Lastly, as required by law, future projects within the project site would be required to provide adequate access for emergency vehicles. In addition, construction of future development could result in short-term temporary impacts on street traffic. Projects would be evaluated on an individual basis, and it is likely that similar mitigation to MM4.6-4 would be required to ensure that emergency response teams for the City of Huntington Beach would be notified of any lane closures during construction activities and that a minimum one lane would remain open at all times to provide adequate emergency access to the site and surrounding neighborhoods. Therefore, although fewer residential uses would be permitted under Alternative 2, all

potential impacts with respect to hazards and hazardous materials would be substantially similar and would remain less than significant.

Hydrology and Water Quality

Similar to the proposed project, construction and operation of future uses under Alternative 2 could increase stormwater runoff such that stormwater pollutant loads or concentrations, including erosion and sediment, are increased. As approximately 1,900 fewer residential units would be permitted under this alternative, it's possible that this Alternative could result in lower pollutant concentrations than the proposed project. However, at the same time, this Alternative would allow an increase in commercial uses compared to the project. Consequently, it is reasonable to assume the overall pollutant concentrations would be similar. All existing regulations, programs, and policies (Municipal NPDES Permit and associated DAMP, URMP, WQMP, and City of Huntington Beach LIP; Municipal Code Section 14.25; City conditions of approval and permit review process; and, General Plan Goal EH2), would still apply to development under this Alternative. In addition, MM4.7-1 would be required for development under this Alternative to reduce potential pollutant loads and sediment in runoff, ensure that appropriate BMPs are employed, ensure that regulatory requirements are met, and ensure that any post-construction violation of WDRs would not be substantial. Therefore, effects on water quality standards would not be substantial and impacts of this Alternative to on-site erosion and siltation and violation of WDRs or water quality standards would be less than significant, similar to the proposed project.

Similar impacts would occur with respect to the depletion of groundwater resources compared to the proposed project because future development under this Alternative will still be compelled to comply with regulatory requirements, city requirements (depicted as CR4.7-1 in this EIR), and MM4.7-2. This mitigation would require a Groundwater Hydrology Study to determine whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. Therefore, impacts on groundwater supplies and lowering of the local groundwater table would be less than significant, similar to the proposed project.

As discussed in Impact 4.7-3, the storm drain system serving the project site is currently constrained for build-out of the General Plan (as assessed in the MPD) and may be constrained for existing conditions. Consequently, MM4.7-3 and MM4.7-4 would be required to assess each specific development contribution under this Alternative to potential system capacity constraints and provide for mitigation of constraints such that potential impacts to storm drain system capacities would be less than significant.

Decreasing water supplies and increasing water demands require extreme conservation methods that may include substantial use of recycled water. This condition would remain regardless of implementation of the proposed project. If recycled water contributes to dry-weather runoff, the high salinity runoff could also affect surface water quality. Similar to the proposed project, use of recycled water under this Alternative would be subject to either an individual WDR or the final Recycled Water WDR (when adopted), which would impose effluent limitations to minimize potential degradation of water resources. Therefore, water quality impacts from recycled water use would be less than significant.

Fewer residential uses would be developed under this Alternative; however, such structures could still be placed within a 100-year flood hazard area and expose people and structures to risk of loss, injury, or death involving flooding including flooding by failure of a levee or dam. Residential and nonresidential structures are required to adhere to FEMA regulations associated with development in flood hazard areas. In addition, improvements to the Santa Ana River and Prado Dam reduce the risk of dam failure, and existing emergency response mechanisms would also minimize the risk to people and structures from failure of the Prado Dam. Therefore, similar to the proposed project, adherence to existing regulations would ensure that impacts associated with risks to people or structures, from placement of structures within a flood hazard area and dam failure would be less than significant.

The majority of the project site is located at the edge of the flood hazard area, in an area that is likely flooded by lateral spreading, and would not result in substantially more structures in the overall floodplain compared to existing conditions (the floodplain is currently primarily developed with structures). Because the project site currently contains large structures with little vacant lands that would be developed, implementation of Alternative 2 would not create substantially more fill compared to existing conditions. Therefore, although structures could be located within a flood hazard area, future developments would not impede or redirect flood flows. Similar to the proposed project, this impact would be less than significant.

Similar to the proposed project, implementation of this Alternative could result in the construction of new and/or improved stormwater drainage facilities. Construction of these new facilities would be subject to existing regulatory requirements, including but not limited to preparation and implementation of a SWPPP and a City precise grading permit, the De Minimus Threat General Permit, and stormwater BMPs. Therefore, existing regulatory requirements would ensure that construction of new or expanded stormwater drainage facilities would not result in substantial environmental effects. Similar to the proposed project, this impact would remain less than significant.

Land Use

Implementation of the proposed project would adopt new standards and land uses not currently allowed within the project site through adoption of the Specific Plan. This Alternative proposes 1,900 fewer residential units and approximately 137,000 sf more commercial uses compared to the proposed project. However, both the proposed project and this Alternative would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of mitigating an environmental effect. Impacts would be the same as the proposed project and are considered less than significant.

Noise

Development of projects as part of the proposed project and for this Alternative would require the use of heavy equipment for demolition, site excavation, installation of utilities, site grading, paving, and building fabrication. Under Section 8.40.090(d) (Special Provisions) of Chapter 8.40 of the City's Municipal Code, noise sources associated with construction are exempt from the requirements of the Municipal Code, provided that the project developer has acquired the proper permit(s) from the City and construction activities do not occur between the hours of 8:00 P.M. and 7:00 A.M. on weekdays, including

Saturday, or at any time on Sunday or a federal holiday. In addition, this Alternative would adhere to the same mitigation measures as those required by the proposed project. Thus, the proposed project and this Alternative would not violate established standards and impacts would be less than significant.

Impacts related to operation of the proposed project were found to be less than significant with mitigation. Operational impacts were found as a result of HVAC units on new buildings. Since the Alternative would have similar impacts and would require the same mitigation measures that require the installation of sound attenuating walls, impacts would be similar and less than significant.

Impacts related to excessive ground vibration were found to be less than significant for operation of the proposed project. Much of the source of vibration would be from delivery trucks, but they are expected to not generate vibration levels in excess of FTA's 85 VdB annoyance threshold. This impact would be similar for the proposed project and this Alternative. Vibration impacts resulting from construction were found to be significant due to certain construction equipment. The EIR for the proposed project found that nearby sensitive receptors could experience up to 87 VdB if pile drivers are not used, and up to 112 VdB if pile drivers are used. Even after the implementation of mitigation measures, impacts remain significant. Since this Alternative would allow the construction of similar structures that utilize similar construction techniques, the Alternative is expected to have similar significant impacts related to vibration.

The proposed project was found to have less than significant impacts related to substantial temporary or periodic increases in ambient noise levels for both construction and operation. Construction activities could generate substantial noise. However, construction activities are exempt from the allowable noise thresholds set forth in the Noise Ordinance as long as they comply with the Municipal Code by limiting hours and days when construction can occur. Additionally, Alternative 2 will adhere to mitigation measures MM4.9-1 through MM4.9-3. Since construction activities and techniques would be similar between the proposed project and this Alternative, impacts also would be similar and less than significant. Operation of the proposed project was not found to have substantial temporary or periodic increases in ambient noise levels since the land uses would not allow such noise generating activities. The land uses in this Alternative would be similar (but with 1,900 fewer residential units) and would expect to have lesser impacts than the proposed project although both are considered less than significant impacts.

The proposed project was found to have less than significant impacts related to causing a substantial permanent increase in ambient noise. With the types of land uses contemplated in both the project and this Alternative, traffic noise is the greatest source of noise. None of the area roadway segments was expected to emit a substantial increase in ambient noise for the proposed project. Considering the reduction in vehicle trips generated by Alternative 2, this impact would remain less than significant and would likely result in even lower ambient noise levels compared to the proposed project.

Population and Housing

Implementation of the proposed project would accommodate projected future housing, but would not induce substantial population growth beyond that already forecasted in the General Plan or by SCAG. This is considered a less-than-significant impact. Because this Alternative would construct 1,900 fewer

units, it would provide fewer of SCAG's projected necessary housing units in the City. Project impacts would be similar to the proposed project and be considered less than significant.

Cumulatively, because the proposed project would result in approximately 5,054 fewer residents,[69] the citywide cumulative development would not exceed SCAG's 2030 growth projections. Therefore, the significant cumulative impact would not occur under this Alternative.

Public Services

Implementation of this Alternative would not result in additional impacts to public services beyond those identified for the proposed project. Fire protection was found to be a significant and unavoidable impact for the proposed project, even after the incorporation of MM4.11-1. The impact was identified as significant because the HBFD is currently operating the existing fire stations at their full capacity. Future development within this Alternative is expected to have a similar level of unavoidable significance although on a reduced level. Additional demands on police personnel as a result of implementing this Alternative would not be substantial. The ratio of population to police officers would be slightly lower under this Alternative as it would generate fewer residents. Impacts on schools as a result of the population increase would be similar to, although slightly less than those identified for the proposed project, and City Requirements CR4.11-1 and CR4.11-2 would ensure that this impact remains less than significant. Library services would be considered less than significant with respect to this Alternative, which would require compliance with City Requirement CR4.11-3, which requires Applicants to pay library and community enrichment impact fees, similar to the proposed project.

Recreation

This Alternative would result in the development of 1,900 fewer residential units than the proposed project. The proposed project could develop 6,400 new dwelling units at buildout, adding approximately 17,024 new residents. This Alternative could develop 4,500 units for a total of 11,970 new residents (5,054 fewer residents). As with the proposed project, this Alternative would be required to pay parks and recreation development impact fees, as listed in CR4.12-1. Implementation of the proposed project would increase the use of and/or otherwise affect existing parks and recreational facilities, but would not cause substantial physical deterioration of the facilities to occur or be accelerated. Since this Alternative proposes 1,900 fewer residential units, the impact would still be less than significant, and would be of slightly lesser magnitude than the proposed project.

Impacts related to the construction of new park facilities were found to be significant for the proposed project. Although less park space would be required under this alternative due to the reduction in residential uses, it would still require approximately 59.85 acres of parkland.[70] This is still considered a substantial amount of new parkland that could be required at buildout of the Alternative and it is not feasible at this time to speculate where future acquisitions, development, improvements, and/or expansions to open space and parklands throughout the City may occur. Because such specifics of future

[69] Calculated as 1,900 fewer dwelling units multiplied by 2.66 pph = 5,054 persons
[70] Calculated as: (11,970 persons/1,000 persons) multiplied by 5 acres = 59.85 acres

recreational facilities are unknown at this time, this impact would remain significant and unavoidable, similar to the proposed project.

Transportation

As can be seen from the trip generation results in Table 6-6 (Trip Generation Comparison for Alternative 2 [Decreased Residential]), Alternative 2 generates 3 percent fewer AM peak hour trips and 2 percent fewer PM peak hour trips compared to the proposed project. In addition, average daily trips would be reduced by approximately 1 percent. The peak hour reductions are similar for each subarea with a slightly lower reduction occurring in the Town Center Boulevard segment for the PM peak hour. Overall, the magnitude of change for the affected subareas suggests that Alternative 2 would produce similar results to the proposed project with the possibility of reduced impacts at critical intersections. Critical intersections include the following: Beach Boulevard at Bolsa Avenue; Beach Boulevard at Edinger Avenue; Beach Boulevard at Heil Avenue; Beach Boulevard at Warner Avenue; Warner Avenue at Newland Street; Beach Boulevard at Ellis Avenue; Beach Boulevard at Garfield Avenue; and Adams Avenue at Brookhurst Street.

The proposed project was determined to have interim (2016) and long-range (2030) significant impacts related to the existing traffic load and capacity of the street system. It was determined that with mitigation measures MM4.13-1 through MM4.13-18, the project-related impacts would be reduced to a less-than-significant level at all affected intersections in 2016 and 2030. However, traffic impacts would remain significant under both conditions because implementation of mitigation measures at Caltrans intersections cannot be guaranteed by the City. Since Alternative 2 would result in substantially similar impacts, these would remain significant and unavoidable but would be of a slightly lesser magnitude than the proposed project.

Construction traffic impacts were found to be less than significant for the proposed project due to the time limits imposed on construction activities in the Noise Ordinance and Section 8.40.090(d) of the Municipal Code. In addition, the project area is accessible by several designated truck routes. Impacts to the County's CMP were found to be less than significant with the proposed project as well as for this Alternative. Impacts related to increasing roadway hazards were found to be less than significant for the proposed project. The same code requirements (CR4.13-1 and 2) would be required under this Alternative. Therefore, impacts are expected to be similar.

Impacts related to inadequate emergency access were found to be less than significant for the proposed project since, as part of standard development procedures, plans for future development would be submitted to the City for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations. This same level of compliance would be required under this Alternative and therefore, impacts are expected to be similar and less than significant.

Impacts related to inadequate parking were found to be less than significant for the proposed project. This Alternative would be subject to the parking arrangements as set forth in the Specific Plan. These requirements would ensure that impacts resulting from this Alternative would be less than significant.

Overall, impacts related to transportation and traffic would be similar to, although slightly less than those identified for the proposed project.

Table 6-6 Trip Generation Comparison for Alternative 2 (Decreased Residential)

Segment	Land Use Type	AM Peak Hour			PM Peak Hour			
		In	Out	Total	In	Out	Total	ADT
Town Center Boulevard	Specific Plan	2,533	3,733	6,266	4,598	3,916	8,514	106,409
	Alternative 2	2,617	3,468	6,085	4.435	3,951	8,386	107,291
	Difference	84	-265	-181	-163	35	-128	882
	% Change	3%	-7%	-3%	-4%	1%	-2%	1%
Neighborhood Boulevard	Specific Plan	2,305	1,991	4,296	2,703	2,960	5,663	73,494
	Alternative 2	2,305	1,991	4,296	2,703	2,960	5,663	73,494
	Difference	0	0	0	0	0	0	0
	% Change	0%	0%	0%	0%	0%	0%	0%
Five Points	Specific Plan	1,392	1,996	3,388	2,381	2,070	4,451	56,747
	Alternative 2	1,370	1,820	3,190	2,224	2,002	4,226	54,586
	Difference	-22	-176	-198	-157	-68	-225	-2,161
	% Change	-2%	-9%	-6%	-7%	-3%	-5%	-4%
Neighborhood Parkway	Specific Plan	1,032	1,103	2,135	1,480	1,459	2,939	40,260
	Alternative 2	996	953	1,949	1,334	1,379	2,713	37,807
	Difference	-36	-150	-186	-146	-80	-226	-2,453
	% Change	-3%	-14%	-9%	-10%	-5%	-8%	-6%
Residential Parkway	Specific Plan	462	817	1,279	934	722	1,656	17,373
	Alternative 2	462	817	1,279	934	722	1,656	17,373
	Difference	0	0	0	0	0	0	0
	% Change	0%	0%	0%	0%	0%	0%	0%
Total	***Specific Plan***	***7,724***	***9,640***	***17,364***	***12,096***	***11,127***	***23,223***	***294,283***
	Alternative 2	***7,750***	***9,049***	***16,799***	***11,630***	***11,014***	***22,644***	***290,551***
	Difference	***26***	***-591***	***-565***	***-466***	***-113***	***-579***	***-3,732***
	% Change	***0%***	***-6%***	***-3%***	***-4%***	***-1%***	***-2%***	***-1%***

SOURCE: Austin-Foust Associates, 2009. Trip Generation Analysis of Beach/Edinger Land Use Alternatives, August 4.

Utilities

A decrease of 1,900 dwelling units and an increase of 137,000 sf of commercial/office uses correspond with an overall decrease of approximately 265,979 gallons per day (gpd) or 298 acre-feet per year (AFY) in water demand compared to the proposed project. Similar to the proposed project, future development of the infrastructure under this Alternative would adhere to existing laws and regulations, and the water conveyance infrastructure would be appropriately sized for each site-specific development, which includes potable water, domestic irrigation, and fire flow demands. In addition, because the existing water

treatment plants could adequately serve the proposed project, they would also be able to serve the reduced demand generated by this Alternative without requiring expansions to these facilities. The same code requirements and mitigation measures would be implemented under this Alternative as under the proposed project; however, the projected water supply scenarios in Section 4.14 (Utilities and Service Systems) would still apply. A supply deficit would still remain due to the City's lack of sufficient water resources after 2010 or 2020, depending on the various WSA models used, due to a reduction of imported water supply under the State Water Project (SWP) supply curtailments. Therefore, although this Alternative would result in less water demand than the proposed project, it would still have a significant and unavoidable impact, as no mitigation would overcome the citywide supply shortfall.

Utilizing the duty factors in the Sewer Analysis Report (Appendix H), a decrease of 1,900 dwelling units and an increase of 137,000 sf of commercial/office uses corresponds with an overall decrease in sewer flows by approximately 447,600 gpd (0.45 MGD) compared to the proposed project. Although the sewage flows would be less, the discharges associated with development under Alternative 2 could still exceed the capacity of several existing sewer pipes and require upsizing at several locations. The same code requirements and mitigation measures would be implemented under this Alternative because future development would still require a sewer study at the time of development of individual projects to determine if existing sewer lines need to be upgraded to accommodate the individual project's sewer flow. In addition, OCSD would continue to have adequate treatment capacity available under this Alternative. Further, development under this Alternative would be required to adhere to existing laws and regulations associated with wastewater discharge and treatment requirements. Therefore, wastewater impacts would be less than significant, but would be of a lesser magnitude than the proposed project due to the 0.45 MGD decrease in sewer flows.

As shown in Table 6-7 (Difference between Alternative 2 and Specific Plan Solid Waste Generation), Alternative 2 would generate approximately 6,778 fewer pounds per day (or a decrease of 1,237 tons per year) compared to the proposed project. Because the existing landfills demonstrate sufficient capacity to accept the increase in waste stream resulting from the proposed project, a lesser amount of solid waste would also be accommodated. Therefore, impacts would still be less than significant, but would be of a lesser magnitude than the proposed project due to the decrease in solid waste generated.

Table 6-7 Difference between Alternative 2 and Specific Plan Solid Waste Generation

Land Use	*Solid Waste Generation Rates (pounds/day)*	*Units*	*Waste Generated (pounds/day)*	*Waste Generated (tons/year)*
Commercial/Office	0.006/sf	+137,000	822	150
Residential	4/du	-1,900	(7,600)	(1,387)
		Total	***-6,778***	***-1,237***

Residential uses have significantly higher electricity and natural gas demands compared to commercial, office, and hotel uses. Therefore, this Alternative would reduce annual energy demands when compared to the proposed project, as shown in Table 6-8 (Difference between Alternative 2 and Specific Plan Electricity Demands) and Table 6-9 (Difference between Alternative 2 and Specific Plan Natural Gas

Demands). Because an adequate supply of electricity is anticipated to be available to serve the proposed project, future development under Alternative 2 would also be adequately served. Additionally, all new buildings are required to conform to the energy conservation standards specified in CCR Title 24. Therefore, impacts to energy would still be less than significant, but would be of a lesser magnitude than the proposed project.

Table 6-8 Difference between Alternative 2 and Specific Plan Electricity Demands

Land Use	*Generation Rate*	*Unit**	*Demand (kWh/year)*
Commercial*	11.8 kWh/year/sf	+137,000	1,616,600
Residential	6,081.00 kWh/year/unit	-1,900	(11,553,900)
		Total	***-9,937,300***

* For purposes of this analysis, office uses are included as commercial uses.

Table 6-9 Difference between Alternative 2 and Specific Plan Natural Gas Demands

Land Use	*Generation Rate*	*Unit**	*Demand (cf/year)*
Commercial*	34.8-cf/sf/year	+137,000	4,767,600
Residential	49,260 cf/du/year	-1,900	(93,594,000)
		Total	***-88,826,400***

* For purposes of this analysis, office uses are included as commercial uses.

Climate Change

An analysis of the potential significant emission of GHG was done for the proposed project. During buildout and operation of the proposed project, GHGs would be emitted as the result of construction activities and deliveries; new direct operational sources, such as operation of emergency generators, natural gas usage, and operation of fleet vehicles; and indirect operational sources, such as production of electricity, steam and chilled water, transport of water, and decomposition of project-related wastes. GHGs would also be emitted by visitors and employees travelling to and from the project area. Since the proposed project includes measures that are consistent with strategies recommended by the CCAT and the California Attorney General and due to the type of development allowed under the proposed project, the impacts associated with GHG emissions during project operation are considered less than significant. This Alternative proposes 1,900 fewer residential units. However, based on the fact that this Alternative will be required to comply with the same measures as the proposed project as well as MM4.15-1 through MM4.15-9, this Alternative is expected to have similar less-than-significant impacts.

Attainment of Project Objectives

Implementation of this Alternative would satisfy most of the identified project objectives. Under this Alternative, 4,500 residential units, 987,400 sf commercial/office uses, and 350 hotel rooms could be developed throughout the project site. This Alternative would still allow development to occur under the Specific Plan with all of the same design parameters and guidelines. It would still guide mixed-use

development and create opportunities for people to walk and utilize public transportation. However, it is possible that fewer residential units may lessen some of the positive benefits envisioned by the proposed project by potentially limiting a "critical mass" of consumers that would be expected to patronize certain areas via walking, thus limiting some of the neighborhood clusters or nodes. For the most part, this Alternative would satisfy objectives relating to developing dense residential uses within close proximity to transit, schools, and regional activities while offering close proximity to retail opportunities.

In addition, Alternative 2 would reduce the significant cumulative impact associated with population and housing to a less-than-significant level because cumulative development would not exceed 2030 population projections.

6.4.3 Alternative 3: Decreased Residential and Increased Commercial

Description

Under this Alternative, residential units would be decreased even further to a maximum of 4,300 dwelling units, and approximately 487,000 sf of additional commercial/office square footage would be added, for a total of approximately 1,337,830 sf of commercial/office uses. This would represent an approximate 33 percent reduction in residential uses and 57 percent increase in commercial uses. Similar to Alternative 2, the majority of the land use changes would occur in the Town Center Boulevard segment. All other aspects of the Specific Plan would remain the same.

Potential Impacts

Aesthetics

Similar to the proposed project, there are no scenic vistas located within the project boundaries. In addition, the Newland House Museum would constitute the only off-site focal view of a scenic vista. Due to its listing on the National Register of Historic Places as a significant historic structure, any future development that may occur under this Alternative that could affect this property would be properly evaluated, per existing requirements. Therefore, implementation of Alternative 3 would not obstruct or otherwise degrade existing scenic vistas, and this impact would be less than significant, similar to the proposed project.

Development under this Alternative could result in the same changes to the visual character of the project site as compared to the proposed project. In general, while portions of the project area would change and intensify under Alternative 3 compared to existing conditions, development standards and guidelines of the Specific Plan would ensure that future development includes proper site planning, unique architecture, high-quality building materials, and extensive indoor and outdoor amenities. In general, future development under Alternative 3 would serve to improve the aesthetic character of the project area and enhance the identity of the Beach and Edinger Corridors. This impact would remain less

than significant similar to the proposed project because it would also be developed under the Specific Plan.

Artificial lighting would accompany all new development, including exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting which could be visible from outside. As discussed for the proposed project, new development would generally range from one to three stories at a minimum, and from four to six stories at a maximum permitted height, depending on the various segments. Buildings generally three or more stories in height have the potential to include large building faces that could introduce reflective surfaces (e.g., brightly colored building façades, reflective glass) that could increase existing levels of daytime glare. Implementation of MM4.1-2 would still apply to development under this Alternative. Therefore, future development under this Alternative would result in similar light and glare impacts when compared to the proposed project, and these impacts would remain less than significant.

Overall, aesthetics impacts would be identical to those of the proposed project.

Air Quality

Implementation of the proposed project was found to be consistent with the AQMP for the South Coast Basin. This Alternative will incorporate 2,100 fewer residential units and an additional 487,000 sf of commercial uses. However, it is unlikely that its impact would be greater than those of the proposed project. As a result, this Alternative would be consistent with the AQMP. Based on the consistency of the proposed Specific Plan with AQMP forecasts, this Alternative would not impair implementation of the AQMP, and this impact would be less than significant.

Implementation of the proposed project could contribute substantially to an existing or projected air quality violation for criteria air pollutants during both construction and operation. Construction impacts result from demolition, excavation, building/utility construction, painting, and paving. Both the proposed project and this Alternative would consist of a series of individual construction projects throughout the buildout of the Specific Plan. It is not possible to analyze those potential future impacts because emissions from construction vary by project and include: parcel size, length of construction, building size, amount of required paving and utility construction, etc. The proposed project was found to have significant impacts even with the incorporation of mitigation measures MM4.2-1 through MM4.2-14. Since this Alternative includes 2,100 fewer residential units but an additional 487,000 sf of commercial uses, it is reasonable to expect that the air quality impacts would be similar for construction of the proposed project. Operation of the proposed project was found to have significant effects as well. The proposed land uses were modeled using the URBEMIS 2007 air modeling software. Operation of the proposed project would generate emissions that far exceed the thresholds of significance recommended by the SCAQMD for VOC, NO_X, CO, and PM_{10}. Therefore, it is reasonable to expect that with the net increase in development, this Alternative will have similar significant impacts, although they could be to a greater degree.

Implementation of the proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the proposed project region is in nonattainment under an applicable federal

or state ambient air quality standard. Also discussed above, operation of the proposed project would generate emissions that exceed the thresholds of significance recommended by the SCAQMD for VOC, NO_X, CO, and PM_{10}. Because the Basin is in nonattainment for PM_{10}, VOC, and NO_X (VOC and NO_X being precursors of ozone), the proposed project would make a cumulatively considerable contribution to criteria pollutant emissions. It would be reasonable to expect, given the above discussion, that this Alternative would have a similar significant impact, although it could be to a greater degree than the proposed project.

Operation of the proposed project would increase local traffic volumes above existing conditions, but would not expose sensitive receptors to substantial localized carbon monoxide (CO) concentrations. CALINE4 modeling software was used to model area intersections. Future CO concentrations near these intersections would not exceed the national 35.0 ppm and State 20.0 ppm 1-hour ambient air quality standards or the national or state 9.0 ppm 8-hour ambient air quality standards. In fact, they are well below the threshold. Total ADT generated by this Alternative will be 4% greater than that of the proposed project. However, given how far below the thresholds for national 35.0 ppm and State 20.0 ppm 1-hour ambient air quality standards or the national or state 9.0 ppm 8-hour ambient air quality standards the proposed project was estimated, it would be reasonable to expect slightly greater but less than significant impacts resulting from Alternative 3.

Construction and operation of this Alternative would not create objectionable odors. Standard construction requirements would be imposed upon each applicant to minimize odors from construction, and future developments would be required to adhere to the City's solid waste regulations. Therefore, any project-generated refuse would be stored in covered containers and trash removed at regular intervals. This impact would remain less than significant, similar to the proposed project.

Overall, air quality impacts anticipated under this Alternative would be slightly greater than those of the proposed project and would remain significant and unavoidable.

Biological Resources

Similar to the proposed project, construction-related activities under this Alternative may include building demolition and/or relocation, grading, materials laydown, access and infrastructure improvements, and building construction. These activities could result in the disturbance of nesting migratory species covered under the MBTA. Impacts to migratory birds would be addressed on a site-by-site basis. It is expected that MM4.3-1 would be applied as necessary to comply with the MBTA, and reduce impacts to a less-than-significant level. This impact would be comparable to the proposed project.

There are no wetland habitats or blue-line streams within the project site, as defined by the *Clean Water Act* or the *California Fish and Game Code*. However, wetlands do exist south of the project boundary and the potential exists for new wetlands to be created or develop within the project site throughout buildout of this Alternative. Similar to the proposed Specific Plan, if wetlands are found in the future, project applicants will be required to obtain all necessary wetland permits and mitigate for impacts to wetland habitats. Consequently, impacts would be comparable to the proposed project and would be less than significant.

Overall, impacts to biological resources would be similar as to those of the proposed project.

Cultural Resources

Because development could still occur within the project site (regardless of the type), the potential for demolition of historic structures exists. Although this is still considered unlikely, the impact would remain significant and unavoidable because the Specific Plan doesn't specifically prohibit the demolition of such resources, similar to the proposed project and existing conditions. The project site is considered to be sensitive for the presence of Native American cultural resources, including human remains, as well as paleontological resources. Consequently, any future development (regardless of land use type) that could encounter undisturbed soils would be required to conduct site-specific cultural resource investigations and implement any appropriate avoidance or mitigation measures as deemed necessary, similar to the mitigation measures identified for the proposed project. Consequently, impacts would be comparable to the proposed project and would be less than significant. While the development potential for land use categories would differ from the proposed project (e.g., 2,100 fewer residential units and an additional 487,000 sf of commercial), impacts to cultural resources would be expected to be similar to those of the proposed project.

Geology and Soils

Similar to the proposed project, this Alternative could expose people and/or structures to potentially substantial adverse effects resulting from strong seismic groundshaking or seismic-related ground failure. All impacts associated with geological and soil impacts that were identified for the proposed project would also apply to this Alternative. The risks to people and structures would not be increased regardless of the size or type of development, as adherence to existing regulations would assure seismic safety to the greatest extent possible. In addition, the City would continue to require all future development to prepare and submit a detailed soils and geotechnical analysis for site-specific projects. Therefore, because all future development projects would be required to adhere to existing regulations, impacts associated with rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and landslides would continue to be less than significant.

Similar to the proposed project, future development would result in ground-disrupting activities such as excavation and trenching for foundations and utilities; soil compaction and site grading; and the erection of new structures, all of which would temporarily disturb soils. This could result in soil erosion; however, Applicants for specific development projects must submit a Notice of Intent (NOI) to the State Water Resources Control Board (SWRCB) for coverage under the Statewide General Construction Activity Stormwater Permit and must comply with all applicable requirements, including the preparation of a SWPPP, applicable NPDES Regulations, and best management practices (BMP). Such compliance, in addition to implementation of existing code requirements would ensure that erosion and other soil instability impacts resulting from future construction would be less than significant.

Construction and building of the uses allowed in this Alternative would follow all established policies and codes. Through compliance with federal, state, and local regulations related to seismic safety, impacts

would remain less than significant. Therefore, impacts associated with geology and soils would be similar to the proposed project and would result in a less-than-significant impact.

Hazards and Hazardous Materials

The project site is in an urban area that is already heavily developed with commercial uses and office uses. Implementation of this Alternative would result in more intensive development compared to the proposed project. Similar to existing conditions and those discussed for the proposed project, operation of the proposed uses would involve the use of hazardous materials in the form of basic cleaning materials and landscaping chemicals. Future development under the Specific Plan would be required to comply with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and disposal through the implementation of established safety practices, procedures, and reporting requirements. Compliance with existing regulations would also minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials. The same mitigation measures as those identified for the proposed project (MM4.6-1 through 4.6-3) would still be required for new developments, as necessary, which would minimize the potential risk of contamination by implementing investigation and remediation efforts at future development sites. Such mitigation would also ensure that if future development is located on a site that is included on a list of hazardous materials sites, appropriate remediation would occur. Implementation of this alternative would have the same effect associated with helipads in the project site as any new helipads or heliports proposed in the future would be required to comply with all applicable regulations. Lastly, as required by law, future projects within the project site would be required to provide adequate access for emergency vehicles. In addition, construction of future development could result in short-term temporary impacts on street traffic. Projects would be evaluated on an individual basis, and it is likely that similar mitigation to MM4.6-4 would be required to ensure that emergency response teams for the City of Huntington Beach would be notified of any lane closures during construction activities and that a minimum one lane would remain open at all times to provide adequate emergency access to the site and surrounding neighborhoods. Therefore, all potential impacts with respect to hazards and hazardous materials would be substantially similar and would remain less than significant.

Hydrology and Water Quality

Similar to the proposed project, construction and operation of future uses under Alternative 3 could increase stormwater runoff such that stormwater pollutant loads or concentrations, including erosion and sediment, are increased. This Alternative would result in approximately 1,900 fewer residential units and approximately 487,000 sf more commercial and office uses. Because a substantially greater amount of retail/commercial areas would be permitted, implementation of this Alternative could result in higher pollutant concentrations than the proposed project because fewer conversions to multi-family or high-density residential would occur. All existing regulations, programs, and policies (Municipal NPDES Permit and associated DAMP, URMP, WQMP, and City of Huntington Beach LIP; Municipal Code Section 14.25; City conditions of approval and permit review process; and, General Plan Goal EH2), would still apply to development under this Alternative. In addition, MM4.7-1 would be required for development under this Alternative to reduce potential pollutant loads and sediment in runoff, ensure that appropriate BMPs are employed, ensure that regulatory requirements are met, and that any post-

construction violation of WDRs would not be substantial. Therefore, effects on water quality standards would not be substantial and impacts of this Alternative to on-site erosion and siltation and violation of WDRs or water quality standards would be less than significant, similar to the proposed project.

Similar impacts would occur with respect to the depletion of groundwater resources compared to the proposed project because future development under this Alternative will still be compelled to comply with regulatory requirements, city requirements (depicted as CR4.7-1 in this EIR), and MM4.7-2. This mitigation would require a Groundwater Hydrology Study to determine whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. Therefore, impacts on groundwater supplies and lowering of the local groundwater table would be less than significant, similar to the proposed project.

As discussed in Impact 4.7-3, the storm drain system serving the project site is currently constrained for build-out of the General Plan (as assessed in the MPD) and may be constrained for existing conditions. Consequently, MM4.7-3 and MM4.7-4 would be required to assess each specific development contribution under this Alternative to potential system capacity constraints and provide for mitigation of constraints such that potential impacts to storm drain system capacities would be less than significant.

Decreasing water supplies and increasing water demands require extreme conservation methods that may include substantial use of recycled water. This condition would remain regardless of implementation of the proposed project. If recycled water contributes to dry-weather runoff, the high salinity runoff could also affect surface water quality. Similar to the proposed project, use of recycled water under this Alternative would be subject to either an individual WDR or the final Recycled Water WDR (when adopted), which would impose effluent limitations to minimize potential degradation of water resources. Therefore, water quality impacts from recycled water use would be less than significant.

Fewer residential uses and more commercial and office uses would be developed under this Alternative. Such structures could be placed within a 100-year flood hazard area and expose people and structures to risk of loss, injury, or death involving flooding including flooding by failure of a levee or dam, similar to the proposed project. Residential and nonresidential structures are required to adhere to FEMA regulations associated with development in flood hazard areas. In addition, improvements to the Santa Ana River and Prado Dam reduce the risk of dam failure, and existing emergency response mechanisms would also minimize the risk to people and structures from failure of the Prado Dam. Therefore, similar to the proposed project, adherence to existing regulations would ensure that impacts associated with risks to people or structures, from placement of structures within a flood hazard area and dam failure would be less than significant.

The majority of the project site is located at the edge of the flood hazard area, in an area that is likely flooded by lateral spreading, and would not result in substantially more structures in the overall floodplain compared to existing conditions (the floodplain is currently primarily developed with structures). Because the project site currently contains large structures with little vacant lands that would be developed, implementation of Alternative 3 would not create substantially more fill compared to existing conditions. Therefore, although structures could be located within a flood hazard area, future

developments would not impede or redirect flood flows. Similar to the proposed project, this impact would be less than significant.

Similar to the proposed project, implementation of this Alternative could result in the construction of new and/or improved stormwater drainage facilities. Construction of these new facilities would be subject to existing regulatory requirements, including but not limited to preparation and implementation of a SWPPP and a City precise grading permit, the De Minimus Threat General Permit, and stormwater BMPs. Therefore, existing regulatory requirements would ensure that construction of new or expanded stormwater drainage facilities would not result in substantial environmental effects. Similar to the proposed project this impact would remain less than significant.

Land Use

Implementation of the proposed project would adopt new standards and land uses not currently allowed within the project site through adoption of the proposed Specific Plan. This Alternative proposes 2,100 fewer residential units and 487,000 sf of additional commercial uses compared to the proposed project. However, both the proposed project and this Alternative would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of mitigating an environmental effect. Impacts would be the same as the proposed project and are considered less than significant.

Noise

Development of projects as part of the proposed project and for this Alternative would require the use of heavy equipment for demolition, site excavation, installation of utilities, site grading, paving, and building fabrication. Under Section 8.40.090(d) (Special Provisions) of Chapter 8.40 of the City's Municipal Code, noise sources associated with construction are exempt from the requirements of the *Municipal Code*, provided that the project developer has acquired the proper permit(s) from the City and construction activities do not occur between the hours of 8:00 P.M. and 7:00 A.M. on weekdays, including Saturday, or at any time on Sunday or a federal holiday. In addition, this Alternative would be expected to adhere to the same mitigation measures as those required by the proposed project. Thus, the proposed project and this Alternative would not violate established standards and impacts would be less than significant.

Impacts related to operation of the proposed project were found to be less than significant with mitigation. Operational impacts were found as a result of HVAC units on new buildings. Since the Alternative would have similar impacts and would require similar mitigation measures that require the installation of sound attenuating walls, impacts would be similar and less than significant.

Impacts related to excessive ground vibration were found to be less than significant for the operation of the proposed project. Much of the source of vibration would be from delivery trucks, but they are expected to not generate vibration levels in excess of FTA's 85 VdB annoyance threshold. This impact would be similar for the proposed project and this Alternative. Vibration impacts resulting from construction were found to be significant due to certain construction equipment. The EIR for the proposed project found that nearby sensitive receptors could experience up to 87 VdB if pile drivers are not used and up to 112 VdB if pile drivers are used. Even after the implementation of mitigation

measures, impacts remain significant. Since this Alternative would allow the construction of similar structures that utilize similar construction techniques, the Alternative is expected to have similar significant impacts related to vibration.

The proposed project was found to have less than significant impacts related to substantial temporary or periodic increases in ambient noise levels for both construction and operation. Construction activities could generate substantial noise. However, construction activities are exempt from the allowable noise thresholds set forth in the Noise Ordinance as long as they comply with the Municipal Code by limiting hours and days when construction can occur. Additionally, the proposed project will adhere to mitigation measures MM4.9-1 through MM4.9-3. Since construction activities and techniques would be similar between the proposed project and this Alternative, impacts also would be similar and less than significant. Operation of the proposed project was not found to have substantial temporary or periodic increases in ambient noise levels since the land uses would not allow such noise generating activities. The land uses in this Alternative would be similar (though slightly more intense) and would expect to have similar or slightly greater impacts than the proposed project. However, both are considered less than significant impacts.

The proposed project was found to have less than significant impacts related to causing a substantial permanent increase in ambient noise. With the types of land uses contemplated in both the project and this Alternative, traffic noise is the greatest source of noise. None of the area roadway segments was expected to emit a substantial increase in ambient noise for the proposed project. This Alternative would generate 4 percent more ADT than the proposed project and therefore more ambient noise. However, it would be expected that impacts from this Alternative would remain less than significant.

Population and Housing

Implementation of the proposed project would accommodate projected future housing, but would not induce substantial population growth beyond that already forecasted in the General Plan or by SCAG. This is considered a less-than-significant impact. Because this Alternative would construct 2,100 fewer units, it would provide fewer of SCAG's projected necessary housing units in the City. Project impacts would be similar to the proposed project and are considered less than significant.

Cumulatively, because the proposed project would result in approximately 5,586 fewer residents,[71] the citywide cumulative development would not exceed SCAG's 2030 growth projections. Therefore, the significant cumulative impact would not occur under this Alternative.

Public Services

Implementation of this Alternative would not result in additional impacts to public services beyond those identified for the proposed project. Fire protection was found to be a significant and unavoidable impact for the proposed project, even after the incorporation of MM4.11-1. The impact was identified as significant because the HBFD is currently operating all of the existing fire stations at their full capacity. Future development within this Alternative is expected to have a similar level of unavoidable significance

[71] Calculated as 2,100 fewer dwelling units multiplied by 2.66 pph = 5,586 persons

although on a reduced level. Additional demands on police personnel as a result of implementing this Alternative would not be substantial. The ratio of population to police officers would be slightly lower under this Alternative as it would generate less resident population. Impacts on schools as a result of the population increase would be similar to, although slightly less than those identified for the proposed project, and City Requirements CR4.11-1 and CR4.11-2 would ensure that this impact remains less than significant. Library services would be considered less than significant with respect to this Alternative, assuming compliance with City Requirement CR4.11-3, which requires the Applicant to pay library and community enrichment impact fees, similar to the proposed project.

Recreation

This Alternative would result in the development of 2,100 fewer residential units than the proposed project. The proposed project could develop 6,400 new dwelling units at buildout, adding approximately 17,024 new residents. This Alternative could develop 4,300 units for a total of 11,438 new residents (5,586 fewer residents). The Alternative would also add 487,000 sf of additional commercial retail. As with the proposed project, this Alternative would be required to pay parks and recreation development impact fees, as listed in CR4.12-1. Implementation of the proposed project would increase the use of and/or otherwise affect existing parks and recreational facilities, but would not cause substantial physical deterioration of the facilities to occur or be accelerated. Since this Alternative proposes 2,100 fewer residential units, the impact would less than the proposed project and would be less than significant.

Impacts related to the construction of new park facilities were found to be significant for the proposed project. Although less park space would be required under this alternative due to the reduction in residential uses, it would still require approximately 57.19 acres of parkland.[72] This is still considered a substantial amount of new parkland that could be required at buildout of the Alternative and it is not feasible at this time to speculate where future acquisitions, development, improvements, and/or expansions to open space and parklands throughout the City may occur. Because such specifics of future recreational facilities are unknown at this time, this impact would remain significant and unavoidable, similar to the proposed project.

Transportation

As can be seen from the trip generation results in Table 6-10 (Trip Generation Comparison for Alternative 3 [Decreased Residential/Increased Commercial]), Alternative 3 would result in a 4 percent increase in daily trips, with some increases occurring in the peak hours (as much as six and 7 percent for the Neighborhood Parkway and Residential Parkway segments, respectively). Alternative 3 could potentially result in additional deficiencies identified in the Town Center Boulevard and Neighborhood Parkway segments; however, the impacts identified would not be more than that identified for the current General Plan.

The proposed project was determined to have interim (2016) and long-range (2030) significant impacts related to the existing traffic load and capacity of the street system. It was determined that with mitigation measures MM4.13-1 through MM4.13-18, the project-related impacts would be reduced to a

[72] Calculated as: (11,438 persons/1,000 persons) multiplied by 5 acres = 57.19 acres

less-than-significant level at all affected intersections in 2016 and 2030. However, traffic impacts would remain significant under both conditions because implementation of mitigation measures at Caltrans intersections cannot be guaranteed by the City. Since Alternative 3 could result in a few more deficiencies due to the increase in traffic, these would remain significant and unavoidable and would be of a greater magnitude than the proposed project.

Table 6-10 Trip Generation Comparison for Alternative 3 (Decreased Residential/Increased Commercial)

		AM Peak Hour			PM Peak Hour			
Segment	*Land Use Type*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*ADT*
Town Center Boulevard	Specific Plan	2,533	3,733	6,266	4,598	3,916	8,514	106,409
	Alternative 2	2,762	3,530	6,292	4,575	4,139	8,714	112,870
	Difference	229	-203	26	-23	223	200	6,461
	% Change	9%	-5%	0%	-1%	6%	2%	6%
Neighborhood Boulevard	Specific Plan	2,305	1,991	4,296	2,703	2,960	5,663	73,494
	Alternative 2	2,305	1,991	4,296	2,703	2,960	5,663	73,494
	Difference	0	0	0	0	0	0	0
	% Change	0%	0%	0%	0%	0%	0%	0%
Five Points	Specific Plan	1,392	1,996	3,388	2,381	2,070	4,451	56,747
	Alternative 2	1,433	1,878	3,311	2,310	2,091	4,401	57,248
	Difference	41	-118	-77	-71	21	-50	501
	% Change	3%	-6%	-2%	-3%	1%	-1%	1%
Neighborhood Parkway	Specific Plan	1,032	1,103	2,135	1,480	1,459	2,939	40,260
	Alternative 2	1,149	1,092	2,241	1,546	1,596	3,142	44,294
	Difference	117	-11	106	66	137	203	4,034
	% Change	11%	-1%	5%	4%	9%	7%	10%
Residential Parkway	Specific Plan	462	817	1,279	934	722	1,656	17,373
	Alternative 2	500	850	1,350	985	776	1,761	18,978
	Difference	38	33	71	51	54	105	1,604
	% Change	8%	4%	6%	5%	7%	6%	9%
Total	***Specific Plan***	***7,724***	***9,640***	***17,364***	***12,096***	***11,127***	***23,223***	***294,283***
	Alternative 2	***8,149***	***9,341***	***17,490***	***12,119***	***11,562***	***23,681***	***306,884***
	Difference	***425***	***-299***	***126***	***23***	***435***	***458***	***12,601***
	% Change	6%	-3%	1%	0%	4%	2%	4%

SOURCE: Austin-Foust Associates, 2009. Trip Generation Analysis of Beach/Edinger Land Use Alternatives, August 4.

Construction traffic impacts were found to be less than significant for the proposed project due to the time limits imposed on construction activities in the Noise Ordinance and Section 8.40.090(d) of the Municipal Code. In addition, the project area is accessible by several designated truck routes. Impacts to the County's CMP were found to be less than significant with the proposed project as well as for this

Alternative. Impacts related to increasing roadway hazards were found to be less than significant for the proposed project. The same code requirements (CR4.13-1 and CR4.13-2) would be required under this Alternative. Therefore, impacts are expected to be similar.

Impacts related to inadequate emergency access were found to be less than significant for the proposed project since, as part of standard development procedures, plans for future development would be submitted to the City for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations. This same level of compliance would be required under this Alternative and therefore, impacts are expected to be similar and less than significant.

Impacts related to inadequate parking were found to be less than significant for the proposed project. This Alternative would be subject to the parking arrangements as set forth in the Specific Plan. These requirements would ensure that impacts resulting from this Alternative would be less than significant.

Overall, impacts related to transportation and traffic would be similar to, although slightly greater than those identified for the proposed project.

Utilities

A decrease of 2,100 dwelling units and an increase of 487,000 sf of commercial/office uses correspond with an overall decrease of approximately 293,927 gpd (329 AFY) in water demand compared to the proposed project. Similar to the proposed project, future development of the infrastructure under this Alternative would adhere to existing laws and regulations, and the water conveyance infrastructure would be appropriately sized for each site-specific development, which includes potable water, domestic irrigation, and fire flow demands. In addition, because the existing water treatment plants could adequately serve the proposed project, they would also be able to serve the reduced demand generated by this Alternative without requiring expansions to these facilities. The same code requirements and mitigation measures would be implemented under this Alternative as under the proposed project; however, the projected water supply scenarios in Section 4.14 (Utilities and Service Systems) would still apply. A supply deficit would still remain due to the City's lack of sufficient water resources after 2010 or 2020, depending on the various WSA models used, due to a reduction of imported water supply under the State Water Project (SWP) supply curtailments. Therefore, although this Alternative would result in less water demand than the proposed project, it would still have a significant and unavoidable impact, as no mitigation would overcome the citywide supply shortfall.

Utilizing the duty factors in the Sewer Analysis Report (Appendix H), a decrease of 2,100 dwelling units and an increase of 487,000 sf of commercial/office uses corresponds with an overall decrease in sewer flows by approximately 427,600 gpd (0.43 MGD) compared to the proposed project. Although the sewage flows would be less, the discharges associated with development under Alternative 3 could still exceed the capacity of several existing sewer pipes and require upsizing at several locations. The same code requirements and mitigation measures would be implemented under this Alternative because future development would still require a sewer study at the time of development of individual projects to determine if existing sewer lines need to be upgraded to accommodate the individual project's sewer

flow. In addition, OCSD would continue to have adequate treatment capacity available under this Alternative. Further, development under this Alternative would be required to adhere to existing laws and regulations associated with wastewater discharge and treatment requirements. Therefore, wastewater impacts would be less than significant, but would be of a lesser magnitude than the proposed project due to the 0.43 MGD decrease in sewer flows.

As shown in Table 6-11 (Difference between Alternative 3 and Specific Plan Solid Waste Generation), Alternative 3 would generate approximately 5,478 fewer pounds per day (or a decrease of 1,000 tons per year) compared to the proposed project. Because the existing landfills demonstrate sufficient capacity to accept the increase in waste stream resulting from the proposed project, a lesser amount of solid waste would also be accommodated. Therefore, impacts would still be less than significant, but would be of a lesser magnitude than the proposed project due to the decrease in solid waste generated.

Table 6-11 Difference between Alternative 3 and Specific Plan Solid Waste Generation

Land Use	*Solid Waste Generation Rates (pounds/day)*	*Units*	*Waste Generated (pounds/day)*	*Waste Generated (tons/year)*
Commercial/Office	0.006/sf	+487,000	2,922	533
Residential	4/du	-2,100	(8,400)	(1,533)
		Total	***-5,478***	***-1,000***

Residential uses have significantly higher electricity and natural gas demands compared to commercial, office, and hotel uses. Therefore, this Alternative would reduce annual energy demands when compared to the proposed project, as shown in Table 6-12 (Difference between Alternative 3 and Specific Plan Electricity Demands) and Table 6-13 (Difference between Alternative 3 and Specific Plan Natural Gas Demands). Because an adequate supply of electricity is anticipated to be available to serve the proposed project, future development under Alternative 3 would also be adequately served. Additionally, all new buildings are required to conform to the energy conservation standards specified in CCR Title 24. Therefore, impacts to energy would still be less than significant, but would be of a lesser magnitude than the proposed project.

Table 6-12 Difference between Alternative 3 and Specific Plan Electricity Demands

Land Use	*Generation Rate*	*Unit**	*Demand (kWh/year)*
Commercial*	11.8 kWh/year/sf	+487,000	5,746,600
Residential	6,081.00 kWh/year/unit	-2,100	(12,770,100)
		Total	***-7,023,500***

*For purposes of this analysis, office uses are included as commercial uses.

Table 6-13	Difference between Alternative 3 and Specific Plan Natural Gas Demands		
Land Use	*Generation Rate*	*Unit**	*Demand (cf/year)*
Commercial*	34.8-cf/sf/year	+487,000	16,947,600
Residential	49,260 cf/du/year	-2,100	(103,446,000)
		Total	***-86,498,400***

*For purposes of this analysis, office uses are included as commercial uses.

Climate Change

An analysis of the potential significant emission of GHG was done for the proposed project. During buildout and operation of the proposed project, GHGs would be emitted as the result of construction activities and deliveries; new direct operational sources, such as operation of emergency generators, natural gas usage, and operation of fleet vehicles; and indirect operational sources, such as production of electricity, steam and chilled water, transport of water, and decomposition of project-related wastes. GHGs would also be emitted by visitors and employees travelling to and from the project area. Since the proposed project includes measures that are consistent with strategies recommended by the CCAT and the California Attorney General and due to the type of development allowed under the proposed project, the impacts associated with GHG emissions during project operation are considered less than significant. This Alternative proposes fewer residential land uses but significantly more commercial uses. However, based on the fact that the Alternative will be required to comply with the same measures as the proposed project as well as mitigation measures similar to MM4.15-1 through MM4.15-9, this Alternative is expected to have similar less-than-significant impacts.

Attainment of Project Objectives

Implementation of this Alternative would satisfy all of the identified project objectives. Under this Alternative, 4,300 residential units, 1,337,400 sf of commercial/office uses, and 350 hotel rooms would be permitted throughout the project site. This Alternative would still allow development to occur under the Specific Plan with all of the same design parameters and guidelines. It would still guide mixed-use development and create opportunities for people to walk and utilize public transportation. However, it is possible that fewer residential units may lessen some of the positive benefits envisioned by the proposed project by potentially limiting a "critical mass" of consumers that would be expected to patronize certain areas via walking, thus limiting some of the neighborhood clusters or nodes. For the most part, this Alternative would satisfy objectives relating to developing dense residential uses within close proximity to transit, schools, and regional activities while offering close proximity to retail opportunities.

In addition, Alternative 3 would reduce the significant cumulative impact associated with population and housing to a less-than-significant level because cumulative development would not exceed 2030 population projections. However, it could result in greater impacts to air quality, noise, and traffic.

6.5 COMPARISON OF ALTERNATIVES

Table 6-14 Comparison of Alternatives to the Proposed Project			
Environmental Issue Area	*No Project/Reasonably Foreseeable Development (Continuation of Existing General Plan)*	*Decreased Residential*	*Decreased Residential and Increased Commercial*
Aesthetics	+	=	=
Air Quality	+	–	+
Biological Resources	=	=	=
Cultural Resources	=	=	=
Geology and Soils	=	=	=
Hazards and Hazardous Materials	=	=	=
Hydrology and Water Quality	=	=	=
Land Use	=	=	=
Noise	=	–	+
Population and Housing	–	–	–
Public Services	–	=	=
Recreation	–	=	–
Transportation	+	–	+
Utilities	–	–	–
Climate Change	=	=	=

(–) = Impacts considered to be less when compared with the proposed project.
(+) = Impacts considered to be greater when compared with the proposed project.
(=) = Impacts considered to be equal or similar to the proposed project.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the minimization or avoidance of physical environmental impacts. However, the CEQA Guidelines require that if the environmentally superior Alternative is the No Project Alternative, "the EIR shall also identify an environmentally superior Alternative among the other Alternatives" (15126.6[e][2]). Therefore, Alternative 2 (Decreased Residential) would be considered the environmentally superior alternative, as summarized above in Table 6-14 (Comparison of Alternatives to the Proposed Project).

6.7 REFERENCES

Austin-Foust Associates, Inc. 2009a. *City of Huntington Beach—The Beach-Edinger Specific Plan Traffic Memorandum*, July 2009.

———. 2009b. *Trip Generation Analysis of Beach/Edinger Land Use Alternatives*, August 4.